





VOLUME 47 NO. 7

Red Light district

Old Butte Historical Adventures

By: Betty Luke

Butte, Montana, boasts the largest National Historic District in the United States. Quite an impressive claim for a city of only 35,000 people. Newly expanded, the National Historic Landmark includes parts of the towns of Anaconda and Walkerville and now encompasses 9,744 acres with nearly 6,000 buildings, mining claims and historical residential buildings plus 14 of the surviving Butte mining headframes. A couple of the headframes are lit at night and create an impressive sight even for those just passing through on the freeway that by-passes the old downtown area.

There are a number of walking tours available with both guided and self-guided options. Beginning anywhere in uptown Butte you can explore Butte's unique riches of churches, public buildings, mansions and miner's homes where the history of Butte will be interpreted through a number of descriptive signs attached to many of the uptown buildings. Silver plaques will relate the history of each building and its significance to Butte. You will see murals and fantastic architecture throughout the historic district and will find art galleries, clothing stores, book stores and specialty shops. The following describes some of the history and highlight of attractions to be found in old downtown Butte:



The Butte Silverbow Courthouse - was built in 1912 at a cost that rivaled the state capitol. This artistic masterpiece soon served as a barracks for troops sent to Butte to enforce martial law during labor unrests in 1914.

The Curtis Music Hall - is one of the uptown's oldest buildings and was built in 1892 to house a fancy dance hall.



Dumas Brothel - is a museum now and the only building left in the country built to serve as a bordello and one of the few remaining buildings from Butte's once raucous Red Light District.

Jacobs House - Rumored to be the first brick residence built in Butte; was the home of Butte's first



mayor, Henry Jacobs.

Copper King Mansion - The opulent residence of Copper King William Clark, one of the world's richest men, is now a bed and breakfast.



Arts Chateau - Was originally built as a residence for W.A. Clark's (the famous Copper King's) son, Charles and his new wife, and now serves as a community arts center. The building is modeled after a French chateau. Hirbour Tower - an early day skyscraper built in 1901 was one of the first tall buildings in the US outside of Chicago and New York.

If antiques are your hobby and of interest, there are over 10 antique stores in old downtown Butte. They are enough to keep one busy an entire day themselves.

Branching out a little from the downtown area, you might enjoy seeing Hell Roarin' Gulch on the hill near the Montana Tech campus. In addition to a walking tourof a unique replica of an old pioneer mining town, a guided underground mine tour is offered. One of the tour guides there is Larry Moody, a retired miner who is a member of the Butte Mineral & Gem Club.



At the top of the Continental Divide, to the east of Butte, Our Lady of the Rockies watches over the valley below and oversees all who are there. From 8,500 feet above sea level, her glow and essence are visible for miles coming in to Butte, especially from the west after dark. Scheduled bus tours are offered daily and offer spectacular views of the Summit

Valley below.

These are but a few of the highlights offered in Historic Butte, and we the members of the Butte Mineral & Gem Club hope you will visit our show in August. Take time to see the sights, explore the history and enjoy your time here. For information on the guided and self guided tours mentioned, call Butte Tours at 406-498-3424 or visit www.buttetours.info.



Editor's Corner

Bryan Schroeder

I attended the mid-year meeting and I thought it went quite well. First I would

like to **welcome** those who have

volunteered to service as Officer and Committee Chairpersons in the Northwest Federation. These new additions are as follows:

2nd VICE PRESIDENT: Paul Heesacker, Tualatin Valley Gem Club LONG RANGE PLANNING: Beth Heesacker, Tualatin Valley Gem SAFETY: Bo Jeffers, West Seattle Rock Club SLIDE/ VIDEO LIBRARIAN: Quita Perry, Southern Wa Mineral Soc.

Second, I asked for a show of hands as to who would be interested in seeing field trips listed in this Newsletter. The show of hands was essentially unamimous. I am reluctant to pull field trips out of club newsletters I receive, but if a club sends me a field trip or two, I will be glad to publish them in the newsletter. The field trips list would be much like the show calendar on the back page. If someone outside that club desired to attend the field trip, he or she would be required to contact the field trip chairman or leader for other essential information. This could best be controlled by omitting the location or meeting place. There might be some concern that hundreds will descend on the dig. In reality, there probably won't be a great number outsiders wanting to attend. **FIME SENSITIVE MATERIAL – DO NOT DELAY**

153 Spring Street Richland WA 99354-1651

Northwest Federation of Mineralogical Societies

an Schroeder, Editor

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NFMS WEBSITE: www.amfed.org/nfms

NORTHWEST FEDERATION EXEC. OFFICERS 2006-2007

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PUBLIC RELATION: OPEN; Members: AK-Tom and Linda Cooper, ID-Clarence Wright

SLIDE/ VIDEO LIBRARIAN: Quita Perry, Southern

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SHOW COORDINATION: Judi Allison, Hatrockhounds Gem a Mineral Society, 40 Van Buren St., Umatilla, OR. 97882-9736 (541) 922-6284, rjall@eoni.com. **STAMPS: Hermina Kolski,** Billings Gem & Mineral Club, 208 Riverview #2E, Great Falls, MT 59404, (406) 453-7027

SUPPLIES: OPEN. (Chuck Sonner is warehousing the supplies as of now.)

WAYS & MEANS: Janice Van Cura, Willamette Agate &

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WEBMASTER: Jack Eads, Kitsap Mineral & Gem Soc., 5169 E. Hillcrest Drive, Port Orchard, WA. 98366-8101, (360) 871-2445, jacke@silverlink.net

NFMS WEB SITE: www.amfed.org/nfms

NFMS SPECIAL COMMITTEES 2006

FIELD TRIP CHAIRMEN: Keene Clay, Mt Hood Rock Club, 19473 SE Foster, Boring OR 97009, (503) 558-8500, clavken@comcast.net

NORTHWEST ROCKHOUND RETREAT (Hancock): Lamar Tilgner (Chair), Mt. Hood Rock Club, 200 SE Olvera Ave., Gresham, OR 97080, (503) 666-2905

CLAIMS COMMITTEE: Rocky McCall, Marysville Rock & Gem club, 8330 272nd St. NW, Stanwood, WA 98292-7430 (360) 629-2515, rm711@tgi.net

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AFMS COMMITTEES (NFMS Representatives):

ENDOWMENT FUND Chuck Sonner & Patty Amos, EDITORS HALL OF FAME-Esther Davis, BULLETIN EDITORS-Bryan Schroeder, NFMS /CLUB PUBLICATIONS-Darlene Denton, ROCKHOUND OF THE YEAR-Viola Jones, CONSERVATION LEGISLATION-Darlene Posthuma, EDUCATION-ALL AMERICAN-Margaret Stallknecht, INTERNATIONAL RELATIONS-DBill and Janet Smith, JUNIOR PROGRAMS-Gary Buhr, PROGRAM COMPETITION-Mark Stephens, PUBLIC RELATIONS-OPEN, SAFETY-B0 Jeffers SCHOLARSHIP FOUNDATION-Open, SUPPLIES AND PUBLICATIONS-Open, JUDGE TRAINING COMMITTEE-Dee Holland, WAYS AND MEANS-Janice Van Cura, WEBSITE-Jack Eads.

THINGS YOU SHOULD KNOW

The AMERICAN LANDS ACCESS ASSOCIATION (ALAA) is a 501(c)(4) organization. Its purpose is to promote and ensure the right of amateur hobby fossil and mineral collecting, recreational prospecting and mining, and the use of public and private lands for educational and recreational purposes; and to carry the voice of all amateur collectors and hobbyists to our elected officials, government regulators and public lands managers. Your annual membership fee of \$25.00 helps support their activities. Contact: To be Determined

The AFMS NEWSLETTER is published monthly except Jan-Jul-Aug by the American Federation of Mineralogical Societies. Each NFMS member <u>club</u> should have three people (usually the Pres, Secretary, and Editor) receiving the AFMS Newsletter. If they are not, or if anyone else wants to subscribe (\$4.50 per year), write to: AFMS Central Off., Steve Weinberger, P.O. Box 302, Glyndon, MD 21071-0302. Make checks payable to "AFMS". Email: cebar62@aim.com

The **NORTHWEST NEWSLETTER** is the official publication of the Northwest Federation of Mineralogical Societies (NFMS) and is usually published ten (10) times per year. This publication is brought to you through your club membership in NFMS. The purpose of the Northwest Newsletter is to keep all NFMS members informed of activities and events pertaining to the business and services of the Federation. The Newsletter is printed and mailed to approximately 3500 homes in six states by Burley Reminder in Burley ID. For matters related to the Newsletter (i.e. content, advertising, etc) contact the **Newsletter Editor** (printed elsewhere on this page). For matters related to the Newsletter circulation (new members, address changes, etc.) contact the **Circulation Chairperson** (located elsewhere on this page).

SHOW COORDINATION. Your Federation provides a free service for NFMS members by listing your show in this Newsletter, on the NFMS website, and three magazines (Rocks and Minerals, Rock and Gem, and Lapidary Journal). Please provide the date and time for the show, the club name and show title (if applicable), the location of the show, and most important a contact person with email address, and or phone (e-mail is preferred). Please send your

show information four to six months in advance to the **SHOW COORDINATION** Chairperson (printed elsewhere on this page). If you see an error once your show is listed, or if your show is not listed, contact **Newsletter Editor** (printed elsewhere on this page).

SAVE STAMPS PROGRAM. NFMS members are encouraged to use and save commemorative stamps. The monies generated from the sale of these used (cancelled) stamps is then donated to Cancer Research. The collected stamps can be sent to the STAMPS Chairman (printed elsewhere on the page), brought to the NFMS Annual Show or given to your Federation Director in your club.

ATTENTION CLUB TREASURERS:

Where to send your money:

To NFMS Treasurer for:

Dues and supplies

- 2. Donations for the general fund
- 3. Donations to Junior Achievement Send to: Lyle Vogelpohl, see Treasurer this page.
- To NFMS Endowment Fund Treasurer for:
 - 1. Donations to Endowment Fund
 - 2. Memorial contributions

Make check payable to NFMS Endowment Fund Endowment Fund Treasurer is an open position. Should ask Edna Nelson who she wants the funds to be sent to.

To NFMS Scholarship Chairperson for:

- 1. Donations to AFMS Scholarship Fund
- Memorial contributions
- Make check payable to AFMS Scholarship Fund.

Send to Ella Cox (see Scholarship this page).

To AFMS Endowment Fund for:

- 1. Donations to AFMS Endowment
- 2. Memorials
- Send to: To Be Determined

To ALAA Treasurer for:

1. Memberships, new and renewals

- Donations
- Make check payable to ALAA

Send to Norman W. Hanschu, ALAA Treasurer, 6607 Sturbridge Ln; Canton, MI 48187-2638

(See this page for address, phone, or e-mail)

NFMS NEWSLETTER ADVERTISEMENT. Members, Nonmembers, clubs, etc. can advertise in the Northwest Newsletter. This service is provided to help defray the cost of printing and mailing the newsletter and is encouraged by the Federation. The only criteria for the ad is that it be hobby related (e.g. rocks, equipment, grit, shows, etc.).

Ads for the Northwest Newsletter are \$1.50 per square inch.

Example: $3'' \times 4'' = 12$ inches

12 inches x \$1.50 = \$18 per issue of the

Newsletter

Do not send ads on colored paper because the background will look gray in the ad. For more information or questions call, e-mail or write the Newsletter Editor (printed elsewhere on this page.)

<u>DEADLINE</u>

for YOUR SUBMISSIONS TO the next NORTHWEST NEWSLETTER is ${f MAY}\;10^{th}$

For the June 2007 ISSUE 509 371 1572 BRYAN SCHROEDER NFMS NEWSLETTER EDITOR nfmsnews@verizon.net

COMMENTS & ANNOUNCEMENTS



Chuck Sonner

NFMS President.

The NFMS has made several positive steps over the last year. Our membership has grown by 196 adults and 89

juniors. That is a 37% growth in our junior clubs. This was the second year of NFMS sponsored field trips. The response has been nothing but positive from those attending. Camp Hancock had another great year. This is the late summer retreat that helps develop the lapidary skills and general knowledge of our hobby. This could not be accomplished without the help of dedicated members of the NFMS.

This next year is starting off with several new projects. The Broken Hammer Award will continue to help build the Endowment fund. The NFMS cabochon case will show the material of the Northwest. There is more we can do to strengthen the NFMS and the hobby. This can only be accomplished through the dedication of our members.



Patty Amos

NFMS 1st V. Pres.

Hello to all, hope this finds all of you in great health. Sorry it has taken me so long to send in a newsletter but life sometimes just isn't fair with working

and all of our health issues we have had this last 6 months we just don't seem to be able to get caught up. It seems like one thing after another. The mid-year meeting is almost upon us and I am looking forward to seeing a lot of you there. This past weekend we had our show. We had a great turnout with about 1600 people the first day. Our annual Thunderegg Easter egg hunt went well. As you can see in the picture below we had a great turnout.



This picture was of our older group.

Dick and I did security the night before the show and didn't get back in time to see the younger kids. They are so much fun to watch. The only problem was that it had rained pretty hard the night before. And as you might be able to see, it was very muddy in parts of the field. Hopefully some of these kids will continue to be interested in rocks and minerals. We average around 500 or more kids at our egg hunt. A lot of these kids have been coming to this event for years. They love the rocks and crystals and fossils that we put in the eggs. This is a great idea for other clubs who would like to try & get kids interested in the hobby. You could have it any time of year and call it a Treasure hunt or any name you choose to use. Our hunt has grown over the years. And hopefully it will continue to grow.



The next picture is of our kid's corner. We have a Treasure hunt, and boy there was no room left for anyone to sit at all. We had what we thought were enough supplies to last us the entire weekend. But, we were almost out before we left at 6:00 the

first day. All in all it was a great weekend. The pellets you see in the picture are tumbling pellets, and then we add small tumbled rocks and gems, sunstones. This was started a few years ago and has grown considerably in size. Not only do the kids enjoy it, but more and more of the parents are getting involved with it. I really hope to be able to get back into everything that is going on in the Federation. Once again, sorry for the delay and I look forward to seeing some of you at the mid year and if you happen to be in Roswell, NM, maybe I will see you there.



Margaret Stallknecht

Education Chair

Hi everyone! I hope that you are all getting out and enjoying some rock hounding. Our weather here in Idaho has been awesome the last few weeks.

I have been well accepted at the Rock Shows the last few weeks. I do the Gooding, Idaho Show April 14-15. I have helpers representing me at the Boy Scout Fair April 14. I will be setting up a display at the Boise Discovery Center April 6 and I hope to be at the midyear meeting April 21.

I want to send a whole-hearted **"Get Well"** to Rocky McCall who is having back surgery again in April. I hope to see you at the show this summer.



DARLENE' S DOODLES NFMS Bulletin Aids

You know what? We want POEMS!!! Why not ask your members if they will try their

hand at making up a poem.

There was a family in Connecticut Brought rocks home in a Bucket. They scouted the hills for Minerals But some thought they meant Dinnerolls.

Some hunted for Crystals and Gems The girls got them caught in their Hems. What will they do with what they found? Polish, make jewelry, or throw on the Ground.

Don't throw any away, no matter the kind Someday you won't find any in the Mine. The 'powers—that—be' close & lock Gates To the best digging areas wrote on your slate.

I want my grandkids to love rocks too. Not just diamonds & rubies, but agate, jasper and wood, to name just a few. Come on all you rockhounds & pebble pups Start rhyming words & a poem you make up.

OK, now it's your turn. Think about your fascination for rocks. So easy a 'caveperson' can do it.

Darlene Denton, 5830 Haddon Lane, Anacortes WA 98221 (360) 588-0217

NW FEDERATION CABOCHON CASE By Chuck Sonners

A display case of NFMS material is being developed. Members in the northwest have long known that some of the best material can be found within the boundaries of the NFMS. The case will be displayed at this year's annual show in Montana. As of now, we have enough material for one case. In the future this project could be expanded to several displays. Picture jasper could fill one case with all the varieties found in the northwest. The following is a list of the material for the case this year. If you have a variety not listed or an exceptional example of one that is listed, please consider donating to this project.

Bruneau (2)	Rainbow Obsidian	Morrisonite (2)		
Wood, OR (2)	Pigeon Blood UT	Sunset Agate (3)		
Bat Cave/Ocho	Biggs Jasper (2)			
Mahogany Obs	Owyhee Jasper (4)			
Flamingo Rose	Copco Agate			
Willow Creek J	Blue Mt Jasper			
Rocky Butte Ja	Wood, WA (7)			
Jade/Alaska	Thunder Egg	Montana Agate		

Tempskya

COMMENTS & ANNOUNCEMENTS

Star

Hermina Kolski

Stamps Chairman

NFMS Stamp Project

Because so many people sent boxes and large envelopes of stamps, I was able to put together 59 lbs. of stamps to ship to the dealer. So, now our total for this project is \$3984.30. Thanks to all of you. We will be at the Mid-Year meeting in Kennewick, April 21st, please leave your stamps near the sign-up table.

Then, the following weekend, I'll be in Billings for their show where stamps can be left at the information desk. On August 3-5, we'll be at the Federation show in Butte. Since this is such a big show, I wish you could leave your stamps in or near the information area, as I no longer help Esther & Wes with the supplies. Please continue to save stamps for me along with as much paper around them as possible---like two inches or so. Thank you so very much for your efforts as stamps are becoming really rare these days.



Northwest Fossil of the Month

> By Betty Mclin Hare, Idaho Gem Club, et. al.

The Hagerman Fossil Beds National Monument is in Hagerman, Idaho along the Snake River as it winds through southern Idaho. They will be celebrating their Annual Fossil Daze Memorial Day Weekend with a parade, displays, and festivities in the City Park.

The Hagerman Horse, Idaho's state fossil, lived during the late Pliocene Epoch (3-4 million years ago) when southern Idaho was a warm, vast savannah much like Kenya is today. Lake Idaho provided water to 220 species of mammals, birds, plants, and fish many of which still exist.

The fossils can be found strewn throughout the Snake River Plain around the area around Bruneau and Hagerman. Fine examples of the bones and teeth can be seen at Bruneau Dunes Visitors Center, Hagerman's City Historical Society Museum, & at the Hagerman Fossil Beds National Monument. A skeleton of the horse is at the Smithsonian Museum in Washington, D. C. also. The monument has displays of other fossilized animals that workers have found there. There are interesting movies about the area.

The National Park Service Visitor Center is located on Route 30 in Hagerman, ID across from the high school. Visitor information can be obtained by phone at (208) 837-4793, ext. 5227 or on their website www.nps.gov/hafo/.

Fossil exhibits, an informational DVD, a discovery corner, and programs are provided by park staff. Regularly scheduled ranger-guided tours are available seasonally. Educational programs for groups are available throughout the school year. Reservations are required.



NFMS Broken Hammer Award By Chuck Sonner



has made the largest contribution to the NFMS Endowment found will have its name placed below the now heavily repaired rock hammer. This plaque with the Hammer will be displayed at our annual show. If the winning club wishes to have the award displayed at their club, we only ask that it be returned in time for the annual show.

The winner will be determined by membership. The club with the highest percentage, contributions divided by the number of members, will be declared the winner. If two clubs have the same percentage, they will share the award jointly. If you have any questions, direct them to the Ways & Means Chairperson. They will be answered through the director's bulletin.



Follow the leader Dedicated to Gary Bergeson

By Keene Clay, Mt Hood Rock Club

The attached poem was written in memory of Gary Bergeson. Gary

was an active member of our club and an excellent trip leader. We have not yet been able to replace his preparation and organization for our trips.

Aligned in cars and trucks, we pass thru grass and stone,

Each trailing on the path leading to the final dig. We have followed often, to the edge of places seldom trod,

Recalled in faulty memory and monumented by bits of stone.

Now seeking a final gem on this short and solemn trip,

We share years of giving, leading, and living. Our leader moves on,

peaceful in repose, honored in our thoughts, and alive in our hearts.

In time, in the queue, in each others dust, winding thru grass and stone, we follow the leader.

COMPETITION IN SPOKANE

Barbara Jacobsen, Rules & Awards Chair

I was invited to attend the Spokane Rock Rollers Show on March 9-11,

2007 as a judge and an exhibitor. They had eight competitive cases: two Masters, two Advanced, and four Novices or Juniors. I was assigned to judge four of the cases with Gerry Pfeiffer and Jack Steffes as clerk. We encouraged all of them to compete at the NFMS Regional Show in Butte August 3-5. If you missed the Spokane Show, you missed lots of good action. There were approximately 75 display cases and almost 50 dealers (did I count right?) with thousands of people in attendance. I'd recommend putting the Show on your schedule for next year! And while you're thinking about it, why not compete?

Butte Club Holds a Bazaar By Chloe R. Young, Butte Mineral & Gem Club



The Butte Mineral and Gem Club sponsored a community bazaar Feb. 3, 2007 . There were 36 vendors selling jewelry, note cards, doilies, talc carvings, stained glass, health products, photography and, of course, rocks.

One of the jewelry makers sold necklaces and bolo ties made from rocks he had collected, tumbled and mounted during the last six months.

The couple who owned a Bentonite Clay mine sold health products made of Bentonite. Their two daughters, Lisa and Kristi, made animal treats and quilts to sell.

Ed Laird displayed and had for sale some arrowheads he had made and some he found.

The Mineral Museum at Montana Tech College had a booth to sell "sticky rocks", and memberships to the museum.

There were four display cases; one held award winning bolo ties made by Bill Luke. The two cases in the hallway had attractive and interesting arrangements of Montana minerals. The last case was a back-lit agate display originally owned by the late John Radcliffe of the White River Rock Club, Buckley, Washington -and shown by Bill Luke.

Pat Good showed off her beading skills as she worked on her loom in the hallway making a checkbook cover.

For a first year production the bazaar was a moderately successful event. The bazaar was created and administered by, Phyllis Moody, Marilyn Packer and Chloe Young who presented the Club with a check for \$689. Wait until next year - overrun with dealers and buyers!!

PROPOSED RESOLUTIONS FOR THE 2007 ANNUAL MEETING

West Seattle Resolution: Proposal for change of registered address for the Annual Filing with the State of Washington

WHEREAS: Article II of the NFMS Articles of Incorporation AND Article I (Section 2) of the NFMS By-Laws state the principal address being that of the registered agent, Toby Cozens at 4401 SW Hill St. Seattle, WA 98116; AND

WHEREAS: Toby Cozens died in December of 2006: AND WHEREAS; The agent and registered address needs to be that of a member in good standing residing in Washington State; In as much as NFMS Past President and the current NFMS Treasurer, Lyle Vogelpohl is a resident of Washington State and is a member in good standing of West Seattle Rock Club, Inc. THEREFORE: Let it be resolved to amend Article II of the Articles of Incorporation of the Northwest Federation of Mineralogical Societies, Inc. to read "The principal place of business of this corporation and its Post Office address shall be 8810 37th Ave SW. Seattle, Washington 98126 AND

THEREFORE: Let it be resolved to amend Article I (Section 2) of the NFMS By-Laws to read "The principal place of business of this corporation shall be 8810 37th Ave SW, Seattle, Washington 98126.

Signed this 24th day of January 2007 by officers of West Seattle Rock Club. Inc. for its members.

Original signed	Original signed	Original signed
President	Secretary	Federation Director

Butte Club Resolution (01), Subject: Eliminate the position of 2nd Vice President from the NFMS Executive Board (Article VII, Part B, Sections 1)

<u>Whereas</u>: It is increasingly difficult to impossible to find candidates willing to accept nomination for office in the NFMS;

And, <u>Whereas</u>: Many members of the NFMS have suggested that these changes are in order due to necessity and as a probable improvement;

And, <u>Whereas</u>: A separate resolution is submitted to eliminate the one-year limit on the President;

And, <u>Whereas</u>: For consistency in all Documents, all references to 1st and/or 2nd Vice President need to be changed to Vice President.

And, <u>Whereas</u>: The By-Laws consistently define the secretary as "Executive Secretary".

Now, <u>Therefore</u>, be it resolved to revise Article V of the Articles of Incorporation of the Northwest Federation of Mineralogical Societies, Inc. to revise the wording from "1st Vice President, 2nd Vice President" to read: "Vice President". And revise the wording "Secretary" to read: "Executive Secretary".

ARTICLE V will then read, in its entirety, upon approval:

The affairs of this corporation shall be managed by an assembly of Directors, which shall consist of the President, Vice President, Executive Secretary and Treasurer as ex-officio members and one Director from each member society duly elected from that group.

And, further, be it resolved to revise Article III, Section 2 of the By-Laws to read "Vice President" instead of "1st Vice President" (two (2) occurrences).

And, further, be it resolved to revise Article VII, Part B, Section 1 of the By-Laws to replace "1st Vice President, 2nd Vice President" with "Vice President". And Part D, Section 2 to read "Vice President" instead of "1st Vice President"

And, further, be it resolved to revise Article X, Section 1 (b) of the By-Laws to read: "No member of the Executive Board shall be appointed chairman of a Committee except the Vice-president, upon election to that office automatically becomes Chairman of the Budget Committee."

Submitted by Butte Mineral & Gem Club, April 6, 2007 Bill Luke, President (sig), Betty Luke, Secretary (sig), Joe Slouber, Federation Director (sig)

Butte Club Resolution (02): Subject: Eliminate references to the Annual Meeting being held on the week-end of Labor Day. This has not been the practice for many years and a more reasonable definition is in order.

Whereas: the Annual Meeting has not been held on Saturday preceding Labor Day for many years

And, <u>Whereas</u>: The Annual Meeting time and date are established to occur during the Annual Show which the Host Society has received acceptance as to date and place

And, <u>Whereas</u>: There is only one section in By-Laws, Article IV, Fiscal Year, eliminate the wording "Section 1."

Now, <u>Therefore</u>, be it resolved to revise Article VI of the Articles of Incorporation of the Northwest Federation of Mineralogical Societies, Inc. to eliminate references to Labor Day and insert "which will be held in conjunction with the Annual Show and Convention as established by the Host Society and approved by the Assembly of Directors."

ARTICLE VI will then read, in its entirety, upon approval:

Election of officers of this corporation shall be held annually at the Annual Meeting of this corporation, which will be held in conjunction with the Annual Show and Convention as established by the Host Society and approved by the Assembly of Directors.

And, further, be it resolved to revise Article IV of the By-Laws to eliminate the wording "In those years when the Annual Meeting is held other than on Labor Day weekend." and revise "Meeting" to "Annual Meeting." The article to read, in its entirety:

The fiscal year shall be from September 1st to August 31st, of the succeeding year. The books shall be closed and audited as of August 31st. An interim financial report shall be prepared for the Annual Meeting.

Submitted by Butte Mineral & Gem Club, April 6, 2007

Bill Luke, President (Sig), Betty Luke, Secretary (Sig), Joe Slouber, Federation Director (Sig)

Butte Club Resolution (03), Subject: Eliminate Sections 5 and 6 of ARTICLE VII, Part D. Elections of Officers

<u>Whereas</u>: It is time to eliminate the one-year limit on the term of President And, <u>Whereas</u>: Many candidates may agree to nomination for more than one year, or after having previously served the NFMS.

And, <u>Whereas</u>: Section 2 already contains the statement, "it shall be customary to nominate the current Vice President for the office of President", Section 5 is not needed.

And, <u>Whereas:</u> If the "best candidates" happen to be of the same family, and agree to be nominated, it is up to the nominee and the voting Delegates to decide what is best for the NFMS.

And, <u>Whereas</u>: It is the duty of the Nominating Committee to present the "best candidate(s)" for the approval of the voting Delegates, and it is the duty of the voting Delegates to vote responsibly, no limits should be imposed on the Nominating Committee by mandate.

And, <u>Whereas</u>: Section 3 allows for nominations from the floor, thus giving the voting Delegates complete control of the elections.

Now, <u>Therefore</u>, be it resolved to revise Article VII, Part D of the By-Laws to eliminate Sections 5 and 6 in their entirety.

Submitted by Butte Mineral & Gem Club, April 6, 2007

Bill Luke, President (sig), Betty Luke, Secretary (sig), Joe Slouber, Federation Director (sig)

Proposed Resolutions Continued

MARYSVILLE CLUB RESOLUTION:

WHEREAS: Article VII, Part D. Election of Officers, Section 5 of the NFMS By-Laws states that no person may serve more than one (I) term as president of the NFMS. And

WHEREAS: It is becoming more difficult to find candidates willing and able to serve.

THEREFORE: Let it be resolved to amend ARTICLE VII, Part D. Election of Officers, Section 5 of the NFMS By-Laws to read "No Person may serve more than one (1) consecutive term as President of the NFMS, and it shall be customary but not mandatory to promote the current 1st Vice President to the office of President.

Submitted by the Marysville Rock and Gem Club on 3-21-2007 Signed by Ken Metz, President, Signed by Carol Cimolino, Secretary Signed by Rocky McCall, Federation Director



others that

Paleophiles and Mineral Enthusiasts: By Marge Collins, AFMS Program Competion

Your help is needed! Newcomers to the Earth Science hobby want to learn more about all the aspects of this hobby. Why not share and explain your special interest to in a presentation? First, you can show it to your Club and aren't far away. Then share it with a wider audience - across the country - by entering AFMS Program Competition.

You can inspire and inform current and future generations of neophytes about your favorite fossil or mineral species, about a classic location, a special museum, a notable field trip, etc. There are so many stories to share! You make the choice! First, make an outline to organize your thoughts, then start taking pictures to illustrate your "story" with that new digital camera whether still or video (or a good 35mm camera). If you've gone digital, you don't have to use a "professional" software program - you can simply make a collection of images on a CD with a written script. (35mm slides and a typed script are still acceptable.)

Just two warnings: first, if you use presentation software, don't be tempted to use transitions, animation, etc. An audience watching an otherwise boring business presentation might appreciate some of those gimmicks for variety, but engaged viewers find them distracting. Second, don't overload the audience with images or information. You don't need to show every image and tell "everything" you know. The goal is to whet viewers' appetite, and inspire them to search for more information on their own. In other words, a relatively short presentation - 35 to 40 minutes is good.

There are a few more tips and suggestions that can lead to a prize winning presentation. They're listed on the AFMS website (www.amfed.org) as are deadline, entry form, etc. You can also contact your Regional Program Librarian or AFMS Program Competition Committee c/o Marge Collins phone: 269-695-4313 or email: margaret@qtm.net (If you don't receive a prompt reply, phone gremlins can mysteriously snag email!)

Sharing your passion for our hobby can lead to many rewards: a cash prize, recognition and best of all, the satisfaction of knowing you are inspiring others.

ALAA April 2007 Report on Activities. By Jon Spunaugle

The U.S. Congress and the Government Land Management Agencies, US Forest Service (USFS) and Bureau of Land Management (BLM) continue to make progress on several fronts of interest to the ALAA and "rockhounds" interested in access to public lands.

The U. S Congress is moving ahead with two identical Fossil Preservation Bills (S 320 and HR 554). The Senate Bill S-320 is listed on the Senate Calendar and will be voted on in the next few weeks. Very likely shortly after the Senate resumes from the Easter Break. The House Bill HR 554 is being reviewed by two Committees; House Natural Resources Subcommittee on National Parks, Forests & Public Lands; and House Agriculture Subcommittee on Department Operations, Oversight, Nutrition, and Forestry. These committees may review the Bill and report on it. However the Speaker of the House of Representatives has the

authority to place the Bill as introduced on the House calendar without comment or consultation with the committees. Comments by rockhounds on these Bills should go to your Congressional Representative immediately if they are to have any effect on the Bills' passage which seems likely.

Congress is also considering 14 new Wilderness designations which will be reviewed in the next report. The US Forest Service is continuing to push forward with land sales under the 2008 Federal Budget and the National Forest Land Adjustment for Rural Communities Act. Their recent actions have been to add additional land parcels for sale. The purpose is to raise funds for use by local communities affected by Forest Service curtailed logging activities. Information on the parcels of land being offered for sale can be found on the Internet at http://www.fs.fed.us/land/staff/spd.html. Though most of the parcels are small isolated lands, several are not and could effect rock collecting. The ALAA urges interested rockhounds to review these parcels and report back to the ALAA on any that contain known collecting locations.

The Bureau of Land Management and the US Forest Service continue to review roads open for use by ATV's and have been holding meetings open to the public for public input. These are great opportunities for interested rockhounds to let the public land managers know their feelings on road closures. As Congress continues to reduce the funding for roads and road maintenance by the public land managers the more roads will be closed. To have an input into which roads will stay open and which will be open to ATV access you need to attend these meetings. One of our best sources of information on these input opportunities has been our association with the Blue Ribbon Coalition. The publish a wealth of information on their web site at http://www.sharetrails.org/. The information can also be found by researching the information on the Federal Register.

If you don't speak up and take advantage of these meetings and public input opportunities, someone else will be speaking instead of you and they may be saying something entirely different from your views.



Long Range Planning

Beth Heesacker, Tualatin Valley Gem Club

Look Up

Many of us walk around with our eyes to the ground looking for that next wonderful and perfect rock. But sometimes we need to

take our eyes off of the near-at-hand and look to the future. I have been a member of the Tualatin Valley Gem Club and a rock

hound for about 5 years now and find that the best way to learn something is to jump in feet first. So, at the last NFMS meeting in Kennewick, WA, I volunteered for the job of Long Range Planning Chair.

I am beginning the process of looking backward by researching the past history of the NFMS in order to be able to look forward to the future. While I am catching up, I am asking all of you who have been members for a lot longer than I have been to look toward the future and tell me what your ideas are. In one of my "past lives" as a computer engineer, we had a term "Blue Sky". This means that ALL ideas, no matter how outrageous, are brought forth and put on the table. Maybe the idea is not workable as-is, but it might spark a discussion that will formulate a plan that will be workable.

What would you like to see in the future for the NFMS? Educational opportunities? Growth plans? Ways we can help our member clubs? Ways we can help the AFMS? Ideas for funding? Other areas of interest? Other ideas? Let the "Blue Sky" be your limit.

Please send me your musings, ideas, comments, etc. no matter how sketchy. Your idea may be just what we need to formulate a plan for the next 5 years, 10 years, 20 years, etc. We need to look up from our own individual searching for that special rock and plan for the future of our rock clubs. We at the NFMS want to be at the forefront of the plan that will take us into the future.

You can send your ideas to me, email to heesacker@coho.net, or snail mail to 4145 NW Heesacker Rd., Forest Grove, OR 97116. I look forward to receiving your ideas and to sharing them with the NFMS Board and with you through articles here in the NFMS Newsletter. And thank you all very much for your dedication to this wonderful hobby and its future.

Finding Mineral Deposits in Granite

Page 7

by

Bob Bristow

I was walking (and crawling) through a thick stand of young firs above the south fork of the Snoqualmie River in Western Washington. It was a warm Saturday afternoon and I was happy to be away from the big city and my job. I love prospecting even if I don't find anything; so discovering a mineral deposit is frosting on the cake. The ground under the fir trees was covered with forest litter and a layer of moss. There was no ground showing, but I looked anyway. Then I saw a mound around a rodent hole. I climbed over a log and knelt down for a close look. In the dirt were a number of small pieces of white quartz. The quartz was angular and there was no sign of erosion. This meant that the quartz had weathered out of the rock nearby. I kicked away some of the moss and there was a small clear quartz crystal with a pointed end. (Quartz crystals are usually clean and shiny in forest litter. The acid in the fir needles cleans the brown stain that covers quartz crystals in the ground.) I now went to work to see if I could find the goodies.

Finding a deposit is a thrill that can be shared by anyone willing to spend the time carefully prospecting in wild granite country. Most rockhounds don't prospect only because they don't know how and assume that most mineral deposits have already been found. Actually, there are many more deposits waiting to be found than all those previously discovered. I have found many deposits and have found signs indicating the possibility of even more. In fact, there are so many signs that it is impossible to check out all of them. So how can you enjoy the thrill of discovery? This is the first of several articles on how to find and interpret those signs. We will start with granite-family rocks since they are common and contain some of nature's most exciting minerals.

The granite family includes granite, granodiorite, monzonite, and several less common rocks. Most people can recognize granite because it is both common and is used for many building and ornamental purposes. Most granite is composed of a mixture of dark and light colored grains. The dark grains are composed of several different minerals but are called

"ferromagnesian" because they contain iron and magnesium. The light-colored grains may be white, pink, gray, and other light colors. These grains are composed of one or more varieties of feldspar. Also mixed in with the very dark and light grains are grains of quartz. The quartz sometimes looks gray because it is smoky. If it is not



Figure 1. Weathered Granite Boulders

smoky, it still looks gray because a clear mineral embedded in other minerals traps the light inside and the clear mineral looks gray or even black. Granite often weathers into large, round boulders that can be delicately balanced on top of each other. Figure 1 shows a pile of weathered boulders on the pass east of San Diego, California. The Figure 1 granite is weathered but not mineralized. When mineralized, the whole rock slowly turns into sand and then into dirt. Here in NE Washington, there is an excellent exposure of weathered granite at Loon Lake on Highway 395. Driving south on the highway, you can watch it turn from unmineralized solid granite at Loon Lake into mineralized granite and finally into brown soil.

The experts advise passing up hard, unweathered granite like that shown in Figure 1 and prospecting in mineralized granite where there are no sharp outcrops. This is true for the large deposits, but the author has found unmineralized granite to be a good source of small veins and miarolitic cavities.

The mineral deposits in granite can usually be placed into the following:

- Veins Sheet-like deposits in which the mineral has been either deposited by fluids or forced in from another area.
- Pegmatites A course-grained granite that may be in the shape of veins or in pods. The mineralization comes from fluids that have been forced into the vein or pod from a nearby granite magma. Some pods can be several hundred feet in diameter.
- Disseminated The mineral has been forced around the granite grains. The result is mineralization throughout the granite. Some of the world's largest copper deposits have formed this way.
- Pods, lodes, lenses These are composed of large globs of the mineral surrounded by granite. They can form by several processes.
- Placer The deposit has formed by water or wind concentrating minerals that have weathered out of the granite.
- Miarolitic cavities Cavities in the granite, generally crystal-lined.
- Contact zones These deposits form around the periphery of the granite pluton and are due to the chemical reaction of the granite with the existing rock that is being intruded by the granite.

Each of the above types of deposits has its own characteristic signs that are too numerous to include in a single article. They will be discussed in future articles where they can be described in detail. In the meantime, there are some relatively easy places to prospect in granite country. Be sure to watch for these even if you are not prospecting, per se, but simply driving through granite country:

- Road cuts The fresher the road cut the better. If you see a new road, drive up it to see if there are some new road cuts that haven't been prospected.
- Mud and rock slides Slides sometimes uncover bedrock. In this case, climb up to see what is in the bedrock.
- Uprooted trees Look in both the roots and the hole in the ground. Rain often cleans the rocks caught in the roots and makes them easier to identify.
- Erosion Anywhere there has been erosion is a good place to look. Even small ditches can result in placer concentrations.
 - Stream beds Gravel bars can be deposits themselves, as can be the bedrock at the bottom of the stream. If the stream is small, you may be able to trace minerals upstream to their source.
 - Old mines/prospects There may be minerals that the miners did not want that are good collectables. Also, erosion around an old mine may have exposed new deposits.
 - Ant hills/gopher mounds Anthills are especially good because they often bring up samples from several feet

down.

Back in the fir forest overlooking the Snoqualmie, I cleaned away the litter, and there it was! A small quartz vein with one to two inch quartz crystals. This was not a great discovery, but anytime I dig into a new deposit, I feel a rush of blood and suddenly know why life can be so good!

Some Humor via HyGrader, 04/07

A three-year-old boy went with his dad to see a litter of kittens. On returning home, he breathlessly informed his mother, "There were 2 boy kittens and 2 girl kittens." "How did you know?" his mother asked. "Daddy picked them up and looked underneath," he replied. "I think it's printed on the bottom."

Another three-year-old put his shoes on by himself. His mother noticed that the left shoe was on the right foot. She said, "Son, your shoes are on the wrong feet." He looked up at her with a raised brow and said, "Don't kid me, Mom. They're the only feet I got!

The Art Of Display

by June Cuip Zeitner

To show off minerals and gems one need only learn and apply a few rules of art. Some are so elementary that most pebble- pups as well as advanced rockhounds know them, nevertheless, they are all important.

Cleanliness: A dusty or finger printed specimen or case detracts from any display.

Arrangement: A pleasing arrangement has balance, good proportion, pleasing color harmony, rhythm, design and suitable background. Generally speaking there are two types of balance in art, formal and informal. If you can draw a line through the center of a design and find that each half is a mirror image of the other, that design is formal. If the two halves are not the same, the balance is informal. An old fashioned garnet brooch is usually formal in design. A modern free form brooch set with a garnet baroque would probably be informal in balance. Formal balance is well suited to arrange cabochons for display. A group of slabs of dissimilar sizes and shapes lend themselves to informal balance.

Why strive for balance? We want to show it off to the best advantage. Just as we would never lay a "picture agate" upside down, so we would not lay it in a row with bigger or brighter stones. Trained to take in things at a quick glance, our eyes naturally seek the center of interest. If you have any prized specimens which you are anxious to show off, give them plenty of space. Overcrowding is a sin of which most of us are guilty. According to the strict rules of art, a display should have most of its weight toward the bottom. This means apparent weight rather than actual weight. A good display can't have the most massive or the brightest pieces at the top. It would appear too heavy. The eye is upset at seeing a display with a high center of gravity which looks as if it would topple over. In a display all on one level, the larger items naturally go to the background, the more spectacular specimens toward the center and the smaller items in the foreground. Every good display, like every good picture, should have margins. The rules governing margins in art call for the widest at the bottom, the second at the top and the two sides either equal to, or a little narrower than the top.

Remember that bright colors strike the eye before dull colors. They tend to come forward. They can be used in smaller amounts and still attract attention. The placing of bright colors must be watched carefully. For example if, you placed a slab of electric blue chrysocolla in each corner of your show case they would tend to draw the eyes in four directions at once. Whatever you had planned for the center of interest in the middle of the case would be lost. Bright colors placed in a hit or miss manner spoil any feeling of balance and rhythm by causing the eye to jump. One large specimen can be balanced by a group of smaller ones. One bright specimen can be balanced by several duller ones. The subject of color is important to rockhounds, and we should know and understand the color wheel, the primary, secondary and tertiary colors and the basic color harmonies. A very bright color should be used in smaller amounts than muted shades or tints. The center of interest of any arrangement should be toward the center where the eye naturally falls first. If too many bright colors other than the center of interest are used, the result is a "busy" or jumpy arrangement. It is definitely worth the effort in arranging a gem or mineral display to carefully consider the color of every piece before deciding where to place it. The artful use of color can make an average collection spectacular, while the poor use of color will make a superb collection seem like a dull jumble.

Background: In the successful display of gems the background against which the gems are placed should be in keeping with the value of the gems. It should not detract from the color of your gems but should flatter every stone in the display. Tweed or calico would not be used to set off a faceted collection. Velvets, velours, silks and satins are more appropriate.

However, as beautiful as red velvet is, it would not be an appropriate background because red is a detracting color. After much experimenting, we have found that a pale blue satin, a grey tone of blue, is the most versatile of background material for mineral display. There is just enough color in this to set off tints as well as shades. Another wonderful background for gems or jewelry is the use of mirrors. A sparkling mirror multiplies the beauty of your gems. Snowy white Styrofoam is another suitable background. It can be cut in various shapes to enhance the beauty of a specimen and is useful in creating split levels of display. A specimen can also be made to stand in the precise position it looks best. Besides the ordinary background material, many rockhounds with imagination use other devices to add interest. A piece of silvery driftwood against a sea-blue backdrop may be used to set off a collection of beach agates. A piece of Indian pottery adds interest to a turquoise display.

Under no circumstances should the background be so big, bright or unusual that it detracts from the real purpose of the exhibit.

light behind them. Spot lights are suitable for large spectacular pieces, but in most cases tube lights directly above or inside each display case are best. Natural light is a big help for home display. A big north or south window opposite your display gives a good light.

Flair: For want of a better word I use flair to describe that something extra which the personality of the rockhound stamps on his display. A beginning artist should learn the rules of art, however, we all know artists who have broken rules and come out on top. Not all great gem displays follow the artists' display rules, but you should learn the rules first before you build up enough faith in your flair to learn when it is right to break a rule or two. If gem dealers and collectors would think of themselves more often as artists, many shops and collectors would greatly be enriched with very little expenditure.

Display cases are not hard to build. With a little effort every hidden box of specimens could graduate into a real artistic display.

via AFMS Newsletter, 5/04; et.al.

Making Diamonds at Home

A fascinating event happened while I was attending the Tucson Show last year. I was in the room of Brazilian mineral dealer Joaquin Stick, and noticed a number of very nice, rather large diamond crystals for sale. When I inquired about them, I was introduced to an elderly gentleman sitting in the corner. This fascinating man was professor Ilmeno Rutille, originally a professor of chemistry at the University of Bologna in Italy, but who had spent most of his professional career working for General Electric in their Diamond Synthesis Lab. Professor Rutille had synthesized all the diamond specimens I had seen in a laboratory in his home!

I spent a very pleasant hour talking to this amazing man, and when I returned home, I began an e-mail correspondence with him. I'm afraid I pestered him for several months with questions about how these diamond crystals were grown, and finally he relented, saying he would show me the process if I would travel to his home laboratory in the mountains near Oakley, Kansas.

It was late May when I arrived at Professor Rutille's home, and after introducing me to his wife, he took me to his laboratory located behind his garage. I was immediately struck by the lack of large, sophisticated equipment one would expect to find in a lab capable of synthesizing diamonds.

I asked Prof. Rutille where he made his diamonds, as there was not a single piece of technical equipment in The place. "That is exactly why I asked you here," he replied, "Please sit down," and he pointed to two chairs against the wall. We sat down, and he handed me some papers. "It's all explained here," he said. While I looked at the papers, Prof. Rutille told a fascinating story.

The early attempts to synthesize diamonds at the GE labs were a trial and error effort that did not succeed until it was discovered that with existing equipment, a catalyst was necessary to lower the temperature and pressure at which diamonds form. An amino acid present in animal muscle and fat tissue turned out to be the key. This was discovered when a technician was preparing samples to go into the furnace while eating a ham sandwich. A bit of ham contaminated the sample, but the technician went ahead with the test. The result was a diamond (small and poor quality) but a diamond. This amino acid catalyst has been kept a secret ever since.

The story continues in the 1980s when Prof. Rutille began work on a project in the GE Synthetic Stones Lab to synthesize elbaite tournaline. The scientists added various metals to the chemical structure to change the color of the crystals. The results were disappointing, except in the case of copper. Adding copper produced a cuprian elbaite of a beautiful, but rather unbelievable, teal blue color. Further research was discontinued because his superiors felt that gems cut from this material looked fake. Prof. Rutille kept about half of the few hundred crystals produced, sending the rest to a mineral dealer friend in Paraiba, Brazil.

Prof. Rutille wondered if copper might also produce a blue color in diamonds and began a series of tests. The attempt to produce blue diamonds failed, but he found that the copper even more drastically reduced the temperature and pressure necessary to produce a diamond. In fact, a pressure of 650 pounds per square inch and a temperature of 112 degrees Fahrenheit were all that was necessary. This could be produced in a home laboratory! Prof. Rutille began to produce his own diamonds in his home lab, and those were the crystals I saw in Tucson.

Creating Diamonds, Continued from Page 8

May 2007

Prof. Rutille assured me that he would have grown rich selling diamonds and never would have told me the details of how these diamonds were made if he had not been threatened by agents from GE and the De Beers Corporation a few weeks before my visit. He was so angry with his former employer that he asked me to publish his findings so that people everywhere could reproduce his results. I agreed, and below are instructions for synthesizing diamonds in your home or garage!

Preparing the Sample: copper pipe (the pipe and end caps are available at any home improvement center). Into the open end of the pipe, place 1.75 grams of the lunchmeat. This will provide the amino acid catalyst. Using a hammer or other tool, crumble the charcoal briquette into pieces small enough to fit into the copper pipe. Add exactly 4.2 grams of charcoal briquette, packing lightly with your finger. Note: DO NOT use briquettes with lighter fluid in them as this will contaminate the sample and cause a risk of fire or explosion! Add another 1.75 grams of lunchmeat on top of the packed charcoal briquette. Place the other end cap on the open end of the copper pipe, creating an enclosed container. Cut two round pieces of masking tape to fit the ends of the end caps, and place one piece of tape on each end cap (this will insulate the copper container from the jaws of the vice)

Note: Gloves and safety glasses should be worn during this step of the procedure! Place the copper container in the jaws of a large, heavy duty vice, one end cap against each jaw of the vice, and tighten enough to hold the container in place. Lay an accurate ruler across the top of the vice. It is necessary to close the vice one eighth of an inch to produce the necessary pressure. First, the container must be heated. Using the blow dryer on "high" setting, heat the container for a minimum of two minutes. Now, while continuing to heat the container, begin to close the vice, slowly. Some effort will be required, but continue closing the vice until you have collapsed the container one eighth of an inch. Continue to heat the container with the blow dryer for a minimum of four more minutes. Don't be surprised if you feel yourself getting hungry; it does smell like barbeque! After four minutes, the blow dryer may be turned off. Allow the container to cool for 30 minutes. Using a hacksaw, cut the container in half and remove your diamond!

I know this leaves one question: What type of lunch-meat to use? I have experimented with several types, and I achieved my best results using pure baloney.

Via Geode, 04/2007 Orginally published on or about April 1st

Rock Saw Tips

by Jerry Sorensen Lakeside Gem & Mineral Club

It's always fun to work on the rock saw. It's frustrating when you have to dismantle the saw in order to replace a part. I needed to replace the inside belt on an older Highland Park saw. For this saw, one has to dismantle the pillow blocks and drive shaft assembly. Looking for an easier solution, I found a new product on the market called Power Twist, an adjustable V-belt. This belt uses interlocking links. I was able to install a new belt in a couple minutes without any tools.

The manufacturer claims the adjustable links do not develop a memory that a standard belt will get and the links dampen vibration giving a cleaner cut for wood working saws. I think this will also be true for rock saws. The manufacturer also rates the belt as a high resistance to water, oil, solvents, and other chemicals.

I bought 7 feet of 1/2 inch wide belt at Empire Rubber & Supply in Pasco for just under \$39. I found their price better than I could order from the Internet.

Happy Cutting!



A view of the adjustable links and the belt on the saw Pictures by Jerry Sorensen.



VIRGIN VALLEY OPALS By Evelyn Cataldo

Lakeside Gem & Mineral Club

Hidden in the high desert region of the northwest corner of Nevada, lie the famous Virgin Valley precious opal mines. The area is famous for black opal, known to occur in only two places on Earth: Virgin Valley, Nevada and New South Wales, Australia.

It is believed that this area was once a large lake surrounded by a forest filled with a variety of tree species. Over time the forest was devastated by a series of volcanic eruptions. Twigs, limbs and rotting wood collected in the coves of the lake. The forests, the lake and the driftwood were buried under layer after layer of ash. The buried wood decayed and left cavities. Over millions of years, heat and pressure filled the cavities with silica that percolated through the ash; gradually hardening into opal. Under the right conditions, precious opal was formed. Over time, the entire area has been uplifted and eroded, exposing the opal deposits. It is said that it took Mother Nature twenty million years to make a Virgin Valley black opal.

The Virgin Valley area has been inhabited by man for more than 10,000 years. In the southwestern portion of the valley lies the "Last Supper Cave". Its bones and artifacts have been carbon dated to 10,000 to 12,000 years ago.

There is evidence that the Chinese sent an expedition to mine the precious black opal approximately 4,500 years ago. During the late 1800's and early 1900's a few specimens were collected by cowboys and sheepherders.

These specimens were reported to the press and soon prospectors found their way to Virgin Valley. Opals were first mined commercially in the area in 1905 with the discovery of the Bonanza Mine. Other early mining operations included the Rainbow Mine. Both are still in production today.

Most of the opal found in Virgin Valley is in the form of replaced wood and limb casts. Opalized bones of vertebrate animals have also been found, as well as opalized bark, roots, pine cones and seeds. The opals are found in layers of clay. The precious opal-bearing layers may be as much as 10-30 feet below the surface and range in thickness from 2-12 feet. Common opal is abundant throughout the layers of clay and ash, but only specific conditions produced the precious opal.

Anything that resembles petrified wood should be carefully examined and kept. Look for specimens that are glassy looking. The background color does not matter. **Some of the most beautiful opal specimens do not show color immediately.** Collect everything glassy looking --- black, clear, milky, brown, etc. Sometimes, good pieces of opal are covered with a white, chalky coating. A small percentage of the opal found in Virgin Valley is valued at more per carat than diamonds. Keep your eyes open for other fossils and artifacts. Your club must be affiliated with the AFMS.

Because this is a new program and we don't

The number of youth is not important: you can have as

NFMS JUNIOR ROCKHOUNDS

May 2007





from Treasurer Lyle Vogelpohl. The numbers show 2005 NFMS Juniors Membership at 240 and a recent

paid count for 2007 NFMS Juniors Membership at 339

or a net increase of 99 new Junior Members! What a

make sure every single new Junior Member, as well as

world. Rockhounding has so much to offer: collecting,

communities while opening doors for the Juniors future

follow your interests and abilities to enjoy the valuable

opportunities offered with your membership in NFMS.

Jim Brace-Thompson, the Juniors Chair for the

America (FRA) and has developed an exciting Merit

Badge Program for Junior Rockhounds. To follow are

receives, with his answers plus his invitation to join the

The program consists of an FRA membership

American Federation of Mineralogical Societies

(AFMS) is the steward for Future Rockhounds of

four frequent questions that Jim Brace-Thompson

How Does the Merit Badge Program Work?

badge, 9 merit badges (Rocks & Minerals, Earth

Showmanship, Communication, Field Trips, and

about a half dozen activities per badge, with kids

required to complete only 3 activities to earn any

Leadership), and a "Rockhound Badge" for kids who

earn 6 of the 9 merit badges. A 100-page guidebook

describes and outlines requirements for each of the 9

merit badges. There are 52 activities to choose from, or

particular badge. Checklists in the guidebook make it

easy for youth leaders to sign off on activities as junior

members complete them. In addition, brief back-up

pages and suggestions help leaders guide their kids through each activity. The guidebook is available both

in hardcopy format (photocopied) and on the AFMS

web site (http://www.amfed.org/fra/meritbadge.htm).

copy of the guidebook and its checklist sheets from the

enrolled in the AFMS Future Rockhounds of America

(FRA). To enroll your kids, contact me (call 805-659-

3577 or email jbraceth@adelphia.net). All you need is

a group of kids (up to age 18), a sponsor, a name, and

an application to FRA. (An application form is

included with this report.)

The program is for clubs with youth members

To save on costs to the program, which is being provided entirely free, I encourage you to download a

web. If this is not possible, contact me for a copy.

How Do I Sign up the Kids in My Local Club?

Resources, Fossils, Lapidary Arts, Collecting,

Future Rockhounds of America:

successes. Hardly enough time to do everything, but

fabulous update to savor and realize that we need to

the "seasoned" Juniors, has opportunities to enjoy

participation and learn from the best hobby in the

lapidary arts, shows, field trips, wonderful friends,

education and connections that build better

Juniors Chairman How Do I Order the Merit Badges?

Gary Buhr have a history as to what potential supply-and-demand will be, I'm keeping distribution of badges centralized, at least for the first year or so. For budgetary reasons, we were only able to order a limited quantity of badges as a start. Thus, rather than send bulk quantities of badges to local youth leaders and exhaust our supply right away, I'm asking that local leaders at individual clubs send me requests for badges as they are earned.

few as 2 and as many as you can handle.

How to go about this? You should make multiple copies of the activity checklists that are included in the merit badge guidebook. For each child, check off activities as they are completed. When at least 3 activities are checked off for any one badge, both the child and youth leader sign the checklist, write in the mailing address of the youth leader, and send it to me: Jim Brace-Thompson, AFMS Juniors Activities Chair, 7319 Eisenhower Street, Ventura, CA 93003. I'll record the info and send the badge. To speed the whole process, I'm also willing to do fulfillment via the phone or email (see my contact info, above) rather than through the mail so long as the youth leader indicates: 1) the badge being requested, 2) which activities a child has completed to earn that badge, 3) the child's name and name of his/her club, and 4) name and mailing address of the youth leader to send the badge to.

I know this is a bit cumbersome and will mean a lag time in getting badges to kids. But in discussing this with others in the AFMS, I decided it's best to use this centralized approach at least in the beginning in order to monitor how much the program is getting utilized. It's also necessary in order to keep tabs on which activities are proving most popular and how many badges actually end up getting awarded. This way, we'll have an accurate record for the future in estimating budgets for how many badges, and which ones, will need to be manufactured on a regular basis. In order to keep the program free, we need to monitor all costs as we start out and keep a lid on those costs by only distributing what's actually being used.

How Can We Make the Merit Badge Program **Better?**

Finally, I welcome feedback, suggestions for improvements to the existing activities, and ideas of new activities and badges to add to the program. Let's all pitch in to provide an educational program by which kids learn, earn rewards, and-as always-have fun!

Join Future Rockhounds of America

HISTORY OF FUTURE ROCKHOUNDS OF

AMERICA

Rockhound clubs throughout the regional Federations have supported youth groups for many years. Most clubs have always had young members but often didn't know what sorts of activities to provide for them. Consequently many youth fell through the cracks. We're sure no one would argue the fact that we need to ensure the future of our hobby by encouraging our youth. Knowing this, under the direction of AFMS President Bill Cox in 1984, a committee was added to the AFMS called "Junior Clubs." Bill coined the name "Future Rockhounds of America" and designed a

certificate to be given to junior clubs becoming members of FRA. It gives pebble pups and juniors the distinction of belonging to something worthwhile. The only requirement for obtaining FRA membership is to be organized and sponsored by a regional Federation club (although exceptions can be made). There are no

dues to pay to the AFMS for being a member. Starting in Fall 2004, Juniors Activities Chair Jim Brace-Thompson developed a free "merit badge" program of guided activities to provide youth leaders with over 50 individual activities in 9 areas: rocks and minerals, earth resources, fossils, lapidary arts, collecting, showmanship, communication, field trips, and leadership. Kids can earn badges in each area. Those earning a minimum of 6 of the 9 badges earn a "Rockhound" badge as a mark of accomplishment and distinction. Details of the program may be found on the "Kids Corner" section of the AFMS web site: www.amfed.org.

HOW TO BECOME A MEMBER OF THE AFMS YOUTH PROGRAM, FUTURE ROCKHOUNDS OF AMERICA?

All you need is a group of kids, a sponsor, a name, and an application to FRA!

REQUIREMENTS:

"News Flash May"

- 1. Your group must be a member of your regional Federation, either through a sponsoring club or through an independent application into your local Federation.
- 2. The number of youth is not important: you can have as few as 2 and as many as you can handle.
- 3. Age: Any kids up to the age of 18.

Just fill out the application below, or contact your local Federation Juniors Chair or check out the "Kids Corner" of the AFMS web site (www.amfed.org).

FUTURE ROCKHOUNDS OF AMERICA APPLICATION

NAME OF YOUTH GROUP:

SPONSORING ADULT CLUB:

FEDERATION: CFMS ____ Eastern ___ Midwest ___ South Central __ SE __ Rocky Mountain __ NW __

CONTACT PERSON:

ADDRESS:

YEAR ORGANIZED:	CURRENT NUMBER
OF YOUTH MEMBERS:	

On the back, please provide a brief description of the activities you do with your youth members, i.e., participation at general meetings, club shows, field trips, and other activities. After completing this questionnaire, please forward it to the AFMS Juniors Activities Chair: Jim Brace-Thompson, 7319 Eisenhower Street, Ventura, California 93003; (805) 659-3577; jbraceth@adelphia.net.

Virgin Valley is high desert. Expect warm days and cool nights. Be prepared with a variety of clothing, plenty of liquids, sun screen, hat, and chap stick. Food, fuel and lodging can be found at Denio, Nevada (35 miles away).

Dry camping is available at the CCC campground which is about five miles from the mines. The campground is free. There are no hookups but outhouses are available, a shower room and swimming in the hot spring. There are fire pits for the cool evenings, but you need to bring your own wood.

Other items you will find useful are a small pick, small garden rake, small shovel, spray bottle with water, a bucket for sitting on, gloves and some zip lock bags to store your specimens.

The opal mines at Virgin Valley are fee dig areas. Some mines allow digging through the tailings, some allow digging in the clay wall and Rainbow Ridge offers loads of virgin material. Prices range from \$50 per day for going through tailings to \$400 for a load of virgin material.

Resources: michelle@goldnuggetwebs.com, nevadaopal.com, royalpeacock.com

Some Thoughts on Color of Gemstones

As all faceters know, color is one of the major considerations to consider in the beauty of a stone. However, in most gemstones, color varies according to the direction in which a specimen is viewed. That is because most gem types are doubly refractive to the extent that pleochroism (the property of a crystal showing different colors when viewed by light parallel to different axes) becomes an issue. In most DR stones, of course, the best and richest hues will be found in a direction parallel to the optic axis.

This is not always the case. Take tournaline for example: viewing normal green tournaline along its longest dimension, that is the optic axis, will produce a muddy, smeared olive green while the direction perpendicular to the optic axis affords a bright, transparent green. With some darker tournaline, light is almost extinguished when viewing through the crystal or optic axis direction and the appearance is dark. Materials of this kind are best cut in cabochon form but some faceters work it steepening the end facets to minimize the insufficient light passage

Via Crystal & Gem News, 03/07: et.al.

MYSTERIOUS MONTANA AGATE SCENES Seen by Microscope as Flaws

It has always been a mystery how the peculiar little scenes got inside a rock as hard as an agate. It is the claim of geologists that the spots were caused by infinitely minute seams of fissures in the softer parts of the rock being filled with metallic oxides when the world was young.

These oxides made four different colors that form various combinations of color when blended together, or appear in single colors in each rock. The red color is oxide of iron. The black color is oxide of manganese. The green is oxide of copper. The blue is oxide of nickel.

The theory has been elaborated by the help of high powered microscopes which show the tracings of little canals so close the naked eye could not detect it, but the oxides remained, stained the rocks in wonderful designs. The fern like and branch effects of the trees, grass and shrubbery, smaller canals form from a common center. In addition to these canals, the rock became flawed through shrinkage while passing through a period of evaporation which, according to scientists, has taken more than 3 million years to reduce the stone to the hardness of 7 points on the Mohs scale.

These canals and flaws have been perfectly healed by soft silicate formations of which the stone is part, and the evaporation has caused the oxides to take on such forms as are seen on the window after a frosty night.

Technically, Montana Agate is known as "**Dendrite**" agate and the moss spots are called Dendrites, It is the third hardest stone in the world, and is cut only with a diamond saw. There can never be two pieces alike even though cut from the same stone.

Via Calgary Lapidary Journal, 03-04/2007; et. al.

THE ANCIENT EYE

Trilobites are among the oldest of the metazoans (multi-cellular animals with differential tissues and organs.) They were incredibly complex, especially for being the earliest with a brain, nervous system, digestive tract, muscular system and compound eye. The puzzle of their complexity was emphasized by the lack of evolutionary predecessors.

Trilobites were strictly marine animals that first occurred at the base of the Cambrian. It was thought they were among the first fossils since no undisputed form was known in the Precambrian. There are a wide variety of fossils of simple plants and animals among the late Precambrian rocks, but nothing as complex as the trilobite. When soft-bodied trilobites were discovered in the Vendian (late Precambrian) period, it is probable that the trilobite's predecessors were often not fossilized because of their lack of hard parts.

Hard shells were primarily a Cambrian development. The evidence is that non-shelled trilobites lived in the Precambrian and developed hard shells of elegant and beautifully simple structure in the Cambrian, after which growing competition caused them to develop increasingly specialized and bizarre forms with complex spines, antlers and other armor probably meant for defense.

The Trilobite's inevitable decline was prolonged during the Carboniferous period, their antlers and spines disappearing, the specialization preventing them from adapting. Declining in numbers and in function, plain, small and defensive, the entire class of animals in the largest phylum of animals on earth, the arthropods, became extinct by the end of the Permian. They had wandered the earth for 300 million years, and had developed 1,500 genera and over 10,000 species. They disappeared by the end of the Permian.

Edited from Larry Solomon in Fossil News

Via Calgary Lapidary Journal, 03-04/2007; et. al

Heat Treating Tiger-Eye by Tim McGinnis Springfield Thunderegg Rock Club

Tiger-eye is quite a rare form of quartz. It gets its characteristic fibrous appearance through substituting itself in place of Crocidolite. Crocidolite is itself a variant of the mineral riebeckite, a complex silicate belonging to the amphibole group, which contains the metallic element iron. It is also known as blue asbestos.

The coloring in tiger-eye derives from addition of iron from the Crocidolite to the oxygen that is already present in the basic quartz structure of tigereye. By heating tiger-eye it is possible to cause a chemical reaction in the limonite particles and change them to the reddish hematite. The resulting mineral is called ox-blood and if this is placed in hydrochloric acid, the coloring will fade to a grey-green color that resembles the precious cat's eye variety of quartz.

Instructions: In most cases but not always, red tiger-eye is not a natural occurrence. It is usually a result of heating and can be done using the kitchen oven. Here's a basic recipe for heat-treating tiger-eye. To protect the tiger-eye from thermal shock during heating cover slabs of ordinary, gold tiger-eye in fine clean silica sand, at least 3 inches all around the slab. Place the metal container in a cold oven and increase the temperature 50° F every hour until it reaches 400° F. Let it cook for one hour and then turn the oven off; DO NOT open the door. Allow plenty of time for the container to cool all the way through. This is best done leaving the container in the oven over night.

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Contact Person	Rick Mauer (503) 691-6395 tallerricardo@juno.com	Jim Nelson (541) 687-8100	Steve Mackey 253-759-8903 smackey@harbornet.com			۵ ب				
Show Location	Clackamas Co. Fair- grounds, 694 NE 4th Ave, Canby, Oregon	Oakway Center, 112 Coburg Rd, Eugene, OR (exit Coburg Road off Hwy. 126)	Expo Hall, Puyallup Fair- grounds, Meridian St. S. & 9th Ave. SW, Puyallup, WA	ER ROCK & GEM CLUB	OUNDS RECYCLING ENDEZVOUS " AILGATE,	P. AND SELL, COCKS & WARE SPACE \$10.00 ABLE \$10.00	AND PUBLIC WELCOM OUTDOOR) OUTDOOR) OUTDOOR) EVENT EVENT FRESHMENTS NETWOR	RADISE RD. FERNDALE, 1880 Miller, 1880 Miller, 1880 Miller, 1880 Miller, 1880 Miller, 1880 Miller, 1880 Miller	INTECTORNORTH ON BARRETT RD. 1887, TURNOS DAD - AROUND 3 CORNERS ON RIGH DAD - AROUND 3 CORNERS ON RIGH	
Club/Show Name	Clackamette Min & Gem, "Adventures in Stone 2007"	Springfield Thunderegg Rock Club, 50th annual Rock & Gem Show	NW Opal Assoc. & BEMS 3rd Amual South Sound Gem, Opal & Mineral Show	MT. BAKE	" ROCKH RJ	SWAI YOUR R SIGN UP FOR A TAILGATE OR TA	ROCKHOUNDS 	PLACE: 1371 PA TIME: 11:00 A	N. I-5 TO EXIT 262 , GO E MCDONALDS) FOLLOW RC	
Show Date	Oct 27-28 Sat 9-6 Sun 10-5	Nov 2-4 Fri 12-7 Sat 10-7 Sun 11-4	Nov 9-11 Fri 10-5 Sat 10-5 Sun 10-4							
Contact Person	Dan Carter (406) 763-5034 or Doug Ellis (406) 266-4452 opalcrusher@hotmail.com	Greg Nielsen (425) 806-2928 or PVGMC, P. O. Box 134 Puyallup, WA 98371 Web: puyallupgemclub.org	Mike Filarski, PO Box 502, Irrigon, OR 97844 stonemorlin1@netscape.net Mike Rose (208) 667 8591	rockinroses2@msn.com Juli Dahl 541-563-7495 jdahl2@casco.net. Daniel DeBoer 360-866-3940 keylock@concast.net	Pete Knudsen (406) 723-8524 Carolyn DeMetz	541-267-5008 czdemetz@earthlink.net Leonard Cone pinecone4@comcast.net	Dave Snyder (541) 679-7553 deyoung1953@msn.com Bob Riggs, 14 Holiday Lane, Missoula, MT 59801 (406) 543-3667	Carolyn DeMetz 541-267-5008 czdemetz@earthlink.net	Jack Edwards 509-529-3673 edwardsj@wwics.com Bill Dettmer, gsi@goal- sys.com, Wanda Power fyp@tenforward.com (360)681-2323 Rocky McCall 360-629-2515	
Show Location	Gallatin Co. Fairgrounds Black & Tamarack St. [Exit I-90 @ N. 7th St.]	Fruitland Grange Hall 112th and 86th Ave East Puyallup, WA	Hermiston Conference Center, 4155 Hwy 395, Hermiston, Oregon Kootenai Co. Fairgrounds at Gov't Way and Kathleen	Coeur d' Alene, ID Lincoln Co Fairgrounds, 633 NE 3 rd St., Newport, OR Parkside Elem School, Stage St. So. (Exit 88 off I- 5). OLYMPIA, WA.	Civic Center 1340 Harrison Ave (I-90, exit Harrison Ave, turn north), Butte MT North Bend Community	Center, 2222 Broadway North Bend, Oregon Yelm Middle School on Hwy 510 Yelm Wa.	Douglas Co. Fargrounds I5 Exit 123 Roseburg, Oregon Ruby's Inn and Convention Center, 4825 North Reserve St., Missoula, MT 59801	4 th Street Parking Lot across Family Restaurant Coos Bay, Oregon	Walla Walla Co. Fair- grounds, Comm. Ctr. Bldg., 9th St & Orchard Carrie Blake Park Guy Cole Convention. Ctr. 202 N. Blake Rd. Seguim, WA Marysville Jr. H S Cafeteria 7th St. and State Ave., Marysville, WA	
Club/Show Name	Bozeman Gem & Mineral Club - 48th Annual Show	Puyallup Valley Gem and Mineral Club Annual Show	Hatrockhounds Annual Gem and Mineral Show Hermiston, Oregon North Idaho Mineral Club Annual Show	Oregon Coast Agate Club Gem and Mineral Show WA Agate& Min Soc & Tenino Rock Cruisers 13th Annual	Butte Min & Gem Club NFMS 67 th Annual "Richest Hill on Earth" Far West Lapidary & Gem	Soc., Annual Indoor Show Nisqually Valley Rock- hound Soc. BIGGEST LITTLE GEM SHOW IN NW	Umpqua Gem & Min. Club Annual Show "Wonders of the West" Hellgate Mineral Society "Rockhounding Around Missoula	Far West Lapidary & Gem Society, So. Coast Rock & Gem Fest 2007 Dealers & Tailgaters	Marcus Whitman Gem & Mineral Soc. 38th Annual Show Clallam County Gem & Mineral Soc "Earth's Treasures" Marysville Rock and Gem Club, 33rd Annual Show "Roctoberfest"	
Show Date	May 12-13 Sat 10-6 Sun 10-4	June 1-3 Fri 10-5 Sat 10-6 Sun 10-4	June 2-3 Sat 10-6 Sun 10-4 Jun 2-3 Sat 9-5	Sun: 10-4 Jun 15-17 Fri 10-6 Sat 10-6 Sun: 10-4:30 Jul 28-29 Sat 9-6 Sun 10-5	Aug 3-5 Fri 10-5 Sat 10-5 Sun 10-5 Aug 4-5	Sat 10-6 Sun 10-5 Aug 18-19 Sun 10-6 Sun 10-5	Sep 8-9 Sat 10-6 Sun 10-4:30 Sep 8-9 Sat 10-6 Sun 10-5	Sep 14-16 Fri 10-6 Sat 10-6 Sun 10-5	Sep 15-16 Sat 10-6 Sun 10-5 Oct 5-7 Fri 9-6 Sat 9-6 Sun 9-2 Oct 13-14 Sat 10-5 Sun 10-5	