



Breccia

Volume 56, Number 12

December 2009

An All-American Club

Santa Clara Valley Gem and Mineral Society

San Jose, California

Randy says...

Hello, Fellow Rockhounds,

Let me take this opportunity to thank everyone that helped with the many things we did this year. We have several exciting things to look forward to such as field trips, the show, study groups, meeting new friends, and most importantly, a chance to serve the club in many ways. If you have not volunteered for a committee position, please consider helping the club by accepting a position. Marc Mullaney is looking for people to help with some key positions, such as Hospitality, Refreshments, Founder's Day Picnic, and several others. Co-Chairmen are always welcome. Please give Marc a call if you are willing to help. His phone number is listed here in the Breccia.

If you have any ideas on how to improve the club, please write them down and give them to a board member. This is your club. We are always open to suggestions and always looking for fun things to do. As members of the North Bay Field Trip group, our club is supposed to host at least one field trip each year. Please contact Dean Welder or me with any ideas.

The Installation Dinner was well attended and I think everyone enjoyed the evening. There were several bags of toys donated to the Marines for Toys for Tots. The food was very good. Many thanks to those of you that came early and helped set up the tables and chairs and decorate the room. It was nice to see all of you!

I wish a Merry Christmas and a prosperous New Year to you all.

Randy Harris
Past President

Note from the editor

This is my last issue. I hope you have found my Breccia beneficial. Now I want to concentrate on other activities, and I look forward to all the fun.

Have a Merry Christmas and a Happy New Year! Pat



What? You have leftover turkey!!!

Try this. It's easy and delicious. I've been making it since Dec.1969.

Turkey Hash

From *The Spice Cookbook* by Avanelle Day and Lillie Stuckey.

Yields six servings.

½ cup chopped onion (or sliced)

½ cup diced green pepper (or sliced)

1 cup raw potatoes cut into strips (or chunks)

2 Tablespoons butter

2 cups leftover cooked turkey (bite-size pieces)

¼ cup turkey stock (or chicken stock)

1 ½ teaspoon salt

¼ teaspoon ground thyme

¼ teaspoon ground black pepper

Chopped parsley

Saute first three ingredients in the butter for 10 minutes.

Add next five ingredients. Mix well.

Cook over low heat 10 minutes.

Serve hot, sprinkled with parsley.



Deck the halls with Minerals!

<http://www.usgs.gov/>

Materials used to color or coat the Christmas light bulbs can include cadmium sulfide or the combination of cerium oxide and titanium dioxide for **yellow**; cuprous oxide or gold chloride for ruby **red**; cobalt oxide for **blue-violet**; manganese dioxide for **amethyst-purple**; neodymium oxide or nickel oxide for **violet**; sulfur for **yellow-amber**; uranium for fluorescent **green**; or chromic oxide for **yellow-green** or **emerald-green**.



Bits and Pieces

Smithies

Mike Perry and Pat Speece

The Smithies are scheduling for next year. We are aiming for classes and workshops to be held on Mondays and Tuesdays.

They are both always 7 to 10pm in our shed. It's not cold in there during classes or workshops.

This is the schedule for January 2010:

Smithie class January 11 and 12 (Monday and Tuesday)

Smithie lab January 19 and 25 (Tuesday and Monday)

Though we haven't decided on an exact project yet, it will involve the very basic necessity of making and setting a bezel.

What do the Smithies do? We make jewelry (rings, bracelets, pendants) using a torch, saw, files, polishers et al). We teach you how and when to use the tools.

We supply all the tools and equipment. We can supply cabs (free), and silver at market cost.

We can accommodate five students at a time. **You must sign up for the classes.** However, you can just come to the workshops. Classes are \$5 for each two-night (6 hour) session. Workshops are free and you do not need to sign up. We sometimes have more than five people --- some come just to visit or to ask questions.

You may sign up via return email. In fact, that is the only way to sign up for the January class since the club meeting is on the fourth Tuesday.

Beginners are always welcome.

We look forward to seeing you!
pat.speece@sbcglobal.net or 266-4327.



Every American Born Will Need . . .

19,245 lbs. Clay,	1309 lbs Copper
82,034 gallons Petroleum,	928 lbs Lead
587,288 lbs Coal	
+67,695 lbs. Other Minerals and Metals	
28,412 lbs. Salt, 671 lbs. Zinc	
5,677 lbs. Bauxite (Aluminum)	
5.68 million cu. ft. Natural Gas	
1.61 million lbs. Stone, Sand, and Gravel	
29,608 lbs. Iron Ore,	65,480 lbs. Cement
19,815 lbs. Phosphate Rock, 1.576 Troy oz. Gold,	
3.6 million pounds of minerals, metals, and fuels in their lifetime	

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Earth Science Studies

Zzyzx Spaces for RV'ers and Camp Paradise

Adapted from the CFMS Newsletter 12/2009

by Marion F. Roberts

If you want to go someplace with like-minded folks to learn about (hands-on) a multitude of lapidary arts and to go on field trips in your spare time, these earth science studies camps are for you. You can bring your own RV, or reserve space in a dorm or maybe even in a more private room. The cost includes food and just about everything else.

Here are the dates:

Camp Paradise (northern California)

Week 1 register May 16, classes start May 17 and end May 21, departure May 22.

Week 2 check-in May 23, ends May 28, with departure May 29.

For details and further information, contact our Federation Director: Ruth Bailey (408) 248-6195. You can also contact the CFMS Earth Sciences Studies chairman, Marion Roberts mvroberts@bigvalley.net



Banded Rocks Reveal Early Earth Conditions, Changes

<http://www.sciencedaily.com>

ScienceDaily (Oct. 12, 2009) — The strikingly banded rocks scattered across the upper Midwest and elsewhere throughout the world are actually ambassadors from the past, offering clues to the environment of the early Earth more than 2 billion years ago.

Called banded iron formations or BIFs, these ancient rocks formed between 3.8 and 1.7 billion years ago at what was then the bottom of the ocean. The stripes represent alternating layers of silica-rich chert and iron-rich minerals like hematite and magnetite.

First mined as a major iron source for modern industrialization, BIFs are also a rich source of information about the geochemical conditions that existed on Earth when the rocks were made. However, interpreting their clues requires understanding how the bands formed, a topic that has been controversial for decades, says Huifang Xu, a geology professor at the University of Wisconsin-Madison. ★

Let's see a show!

CFMS

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

All are in California unless otherwise noted.

Jan 16-17 2010, Exeter, CA

Tule Gem & Mineral Society
Exeter Memorial Bldg.
420 N Kaweah (Hwy 65),
Exeter

Hours: Sat. 10 - 5, Sun. 10-4
Pepper Okada (559) 733-5842
Don Vieira (559) 733-7739
Webpage: tulegem.org

Feb 12-21, 2010, Indio, CA

San Gorgonio Min & Gem Soc
Riverside County Fair &
National Date Festival
Gem Min Building Bldg #1
46-350 Arabia Street
Hours: 10 am - 10 pm
Bert Grisham: (915) 849-1674
Email: bert67@verizon.net

February 26-27 2010, Northridge, CA

Del Air Rockhounds Club
United Methodist Church
9650 Reseda Blvd. (at
Superior St.)
Fri. 3p.m. -9:30 p.m. - Sat. 10-5
Julie Marin (818) 886-7190
<http://delairrockhounds.blogspot.com>

March 5-6-7 2010, Newark, CA

Min and Gem Soc of Castro
Valley; Newark Pavilion
6430 Thornton Avenue,
Newark, CA 94560
Fri & Sat. 10-6; Sun. 10-5
Lary Ham (510) 887-9007
Email: showchair@mgscv.org
Website: www.mgscv.org

March 6-7 2010, Arcadia, CA

Monrovia Rockhounds, Inc.
Los Angeles Co. Arboretum &
Botanic Gardens
301 Baldwin Ave.
Sat. & Sun. 9-4:30
Jo Anna Ritchey (626)
359-1624

Website: www.Moroks.com

March 6-7 2010, Ventura, CA

Ventura Gem & Min Society
Seaside Park, Ventura Co.
Fairgrounds, 10 W. Harbor
Blvd.; Sat. 10-5; Sun. 10-4
Andy Anderson (805)
987-0043
vgms_editor@roadrunner.com
Website: vgms.org

March 13-14 2010, Spreckels, CA

Salinas Valley Rock Gem Club
Veteran's Memorial Hall
5th & Liano Streets
Hours: 10-5 daily
Ernie DeFever (831) 422-3422
minimad64@comcast.net
salinasrockandgem.com

March 13-14 2010, Turlock, CA

Mother Lode Mineral Society
Stanislaus Co. Fairgrounds
900 N Broadway
Hours: Sat. 10-6 Sun. 10-5
Bud & Terry McMillin (209)
524-3494
terry.mcmillin@yahoo.com
www.turlockgemshow.com

March 20-21 2010, Bakersfield, CA

San Joaquin Valley Lap Soc
Kern County Shrine Club
700 south P. Street (P & Bell
Terrace); Hours: 9-5 daily
Lewis Helfrich Home (661)
323-2663
Cell: (661) 378-4450
Email: lewsrocks@netzero.net

March 20-21 2010, Escondido, CA

Palomar Gem & Mineral Club
Army National Guard Armory
304 Park Avenue, Escondido,
CA 92025
Hours: Sat. 9-5 Sun. 9-4
Van Lynch (760) 749-4164
michellandvan@hotmail.com
Website:
www.palomargem.org

March 20-21 2010, Vallejo, CA

Vallejo Gem & Mineral Society
vallejo elks Lodge
2850 Redwood Parkway
Hours: 10 - 5 daily
Phylis Malacki (707) 745-3255
Email: Vgms01@yahoo.com
Website: www.iwired.org

March 27-28 2010, Lemoore, CA

Lemoore Gem & Mineral Club
Lemoore Trinity Hall
470 Champion Street,
Lemoore CA
Hours: 10:00 a.m. - 6:00 p.m.
Judy Pereira (559) 924-4052
lemooregemshow@yahoo.com
www.lemooregems.org

March 27-28 2010, Roseville, CA

Roseville Rock Rollers
Roseville (Placer Co.)
Fairgrounds
800 All American City Blvd.
Hours: Sat. 10-5 Sun. 10-4
Glori Marie (916) 216-1114
gloriarosevillerockrollers@gmail.com
Website: www.rockrollers.com

April 10-11, 2010, Paradise,

Paradise Gem & Min Society
Elks Lodge, 6309 Clark Road
Hours: Sat 10-5; Sun 10-4
Manuel Garcia (530) 877-7324
Email: mmpg@earthlink.net

April 16, 17, 18, 2010, San Jose,

Santa Clara Valley Gem & Min Soc

Santa Clara County
Fairgrounds, 334 Tully Road
Fri 9-5, Sat & Sun 10-5
Frank Mullaney (408)
265-1422
Email: info@scvgms.org
www.scvgms.org

Enjoy!



Columnar Joints

The formation of regular shapes by natural processes make some of the world's most intriguing wonders. The presence of long, mostly six-sided columns (called columnar joints) in cooled lavas is one of those wonders. No one who has seen the awesome grooved structure in Devil's Tower in Wyoming or the Devil's Post Pile in California, can forget this feature. What about a cooling mass of magma could cause such symmetrical columnar joints?

A similar phenomenon can be seen when a mud puddle dries. As it loses water, the mud cracks in symmetric shapes, forming mud polygons. This is because the lose of water causes the mud to shrink. That contraction is relieved by breaking as the dry mud becomes brittle. When things contract like this, they naturally seek the most stable position, For mud, that is a system of natural polygons, separated by vertical cracks.

Basalt and other lavas behave similarly. As lava cools, it doesn't dry out like mud, but it does shrink. As it becomes cold and brittle, the lava contracts and relieves the stress by cracking. The cracking produces a polygonal pattern that extends through the lava flow. As weathering cuts into lava, the rock breaks along the joints, exposing this geometric regularity. Although many of the polygons are six- sided, four, five, seven or eight sides columns are also relatively common. The degree and perfection to which this is developed depends on the thickness and composition of the lava and how fast it cools.

The long sides of the column form parallel to the direction of heat loss as the lava cools. In lava flows, the joints generally run vertically through the flow. This is because the lava was losing its heat upward to the air and down ward to the ground. Sometimes columnar joints are found in veins or dikes of magma cutting the rock. These joints may lay horizontally in the dike, like stacked firewood. This is because the magma in the dike was losing its heat to the cold rocks to its sides. At Devil's Tower, the joints through much of its length run vertically, indicating that heat loss was to the surface. Toward the base of the tower, however, the joints curve horizontally. Here heat loss was easiest to the sides, probably because the tower base was far enough below the ground surface that most of the heat loss was to the sides.

Really thick lava flows have several layers of joints. Ideally, there is a well jointed lower zone, called the lower colonnade. The middle section in the flow can be a more chaotic set of thinner columns and is called the entablature. A thinner, less well developed upper colonnade is also possible. The upper and lower colonnades reflect normal heat loss to the surface and the ground. In the middle of the flow, the entablature's more chaotic pattern suggests that the heat loss direction was less well defined and varied locally.

Any where that lava has been active is a potential place to find columnar joints. The Devil's Post Pile in California, Fingal's Cave along the sea coast of Scotland, and Giants Causeway, along the coast of Northern Ireland are world famous for this feature. Yellowstone Park and the Columbia River plateau in Washington state are other good places to look. Locally, good columnar jointing can be seen in the lava flows on Isle Royale and on the Keweenaw Peninsula of Michigan.

The appearance of these features often has them related, in name and legend at least, with giants or the devil. Yet there is nothing infernal about them. They are just good examples of the workings of the laws of physics and geology.

- Dr. Bill Cordua, University of Wisconsin- River Falls

References:

Holmes, Arthur, 1965, Principles of Geology, second edition, Ronald Press.
MacDonald, Gordon, 1972, Volcanoes, Prentice Hall.



General Meeting Minutes

November 24, 2009

President Randy Harris called the meeting to order at 7:52PM at the Cabana Club in Los Gatos. Minutes of the September 22nd and October 27th meetings were approved as printed in the Breccia. The November board meeting will be immediately follow this meeting. The December joint board meeting will be held at Pat Speece's home on December 3rd at 7:30 PM.

Announcements: Members and guest were welcomed. There will be refreshments available throughout the meeting in the kitchen. Installation Dinner will be December 1st and the deadline for reservations is tonight. Marc Mullaney has signup forms. Directory check list is being passed around. Members need to check their information to make sure it's correct, initial and make corrections as needed. Anne Mullaney spoke about collecting recycling to pay for her 8th grade class trip to Washington DC.

New Members: April Bosworth was given her new member packet and welcomed to the club.

Correspondence: 2 letters from the State Board of Equalization regarding Steven Schuchman, a vendor at our show; a thank you letter from the CFMS Endowment fund for (2) \$25.00 memorial donations for Sylvia Palmieri and John Surrell; 4 returned 2010 promotional packets to the following clubs: North Island Gem and Mineral Society, San Joaquin Valley Lapidary Society, Garage Grinders, and the Gemological Society of San Diego.

Silent Auction: 10 minute break for bidding. Closed tables 2 & 7 after bidding was closed.

Study Groups: *Jewelers* will be meeting on January 7th at Marc Mullaney's home. *Cutaways and Carvers* will not meet in December, but will resume in January. *Stringers* are on hiatus. *Smithies* will be meeting on December 1st. They will be having free open lab nights twice per month on Mondays and Tuesdays, dates to be announced. They will also have two instructional classes per month, dates to be announced. *Faceters* will be on hiatus until March when the weather warms up. *Mineraleers* will be meeting on January 12th at Chuck Boblenz's home, and they will be studying moss agate. *Fossileers* will meet at the next demo day.

Sunshine: Bill Gissler's wife had knee replacement surgery.

DRC: They received a small donation and need to have a thank you note written.

Hospitality: There were 52 members and 1 guest at the meeting.

Silent Auction: 10 minute break for bidding. Closed tables 5 & 9 after bidding was closed.

Federation report: Ruth Bailey, Michael Paone, and Frank Mullaney attended the CFMS meeting in Visalia on November 7th. Ruth reported that the CFMS has two new clubs. The 2010 CFMS/ AFMS show and convention is being put on by the North Orange Gem and Mineral Society and will be held in La Habra on June 18th - 20th. Ruth has copies of all the forms for the show. The forms are also available on the CFMS website. The organizing club has contracted with a hotel for \$65.00 per night for show and convention attendees. Ruth also announced that the 2011 CFMS show will be co-hosted by Superior California Gem and Mineral Association and the Paradise Gem and Mineral Club in Anderson California.

PLAC: No report

Field Trips: Dean Welder has field trip information on two upcoming trips: November 24-30 at Wiley Wells, and December 12th & 13th at the Cady Mountains North.

2010 SCVGMS Show: Marc Mullaney is looking for a couple of committee chairs. Anyone interested in helping with the show should contact Marc. Jennifer House is organizing demonstrators. Dean Welder is organizing display cases. Marc has new posters available. We just received postcards and we still have a lot of business cards for members to distribute. Marc also encouraged members to participate in the Business Card Contest. Next show meeting will be in December and Marc will contact committee members with the date.

Continued on next page.

Silent Auction: 10 minute break for bidding. Closed tables 6 & 8 after bidding was closed.

Club Elections: President Randy Harris opened the nomination process for the following offices and the following people were nominated for the 2010 club year.

President: Marc Mullaney,

Vice President: Rick Kennedy

Secretary: Randy Harris

Treasurer: Frank Mullaney

Editor: June Harris

Federation Director: Ruth Bailey

Alternate Federation Director: Michael Paone

Silent Auction: 10 minute break for bidding. Closed tables 1,3 & 4 after bidding was closed.

Club Elections: President Randy Harris opened the nomination process for the following offices and the following people were nominated for the 2010 club year.

Board of Directors (5): Nancy Reineking, Art Pimentel, Carol Pimentel, RK Owen, and Karen Welder.

Parliamentarian: Dean Welder

Historian: April Bosworth

Members voted unanimously for the nominated slate.

Treasurer: Randy Harris announced that all 2009 bills must be to Frank Mullaney by November 30th so that Frank can close the books for the year.

Auditing Committee: The following members volunteered to audit the 2009 financial records: Karen Welder (committee chairman), Michael Paone, and Ed Orekar. The committee will meet with the Treasurer in December or early January.

Meeting was adjourned at 9:02 PM

Respectfully submitted by June Harris, SCVGMS Secretary



**Santa Clara Valley Gem and Mineral Society
Board meeting minutes
November 24, 2009**

President Randy Harris called the meeting to order at 9:08 PM at the Cabana Club. All of the board members were present except Rick Kennedy, Gail Matthews, Pat Speece, and Vito Cangemi.

MSP(M. Mullaney, F. Mullaney) motion to have all business postponed except for two items until the December board meeting.

Treasurer's Report: MSP (B. Spence, M. Mullaney) to pay the bills presented.

MSP (R. Bailey, M. Mullaney) to allow the treasurer to purchase bars for officers.

Tokens of Appreciation: MSP (M. Mullaney, R. Bailey) to purchase tokens of appreciation for all committee chairs and officers, except president and show chairman. They will be given out at the Installation Dinner. Cost limit of \$3.00 per gift.

Motion to adjourn at 9:14 PM.

Respectfully submitted,

June Harris, SCVGMS Secretary



Need information?

Call:

Board

President: Randy Harris (831) 438-5150

Vice-president: Rick Kennedy (408) 529-9690

Secretary: June Harris (831) 438-5150

Treasurer: Frank Mullaney (408) 266-1791

Editor: Pat Speece (408) 266-4327 or

pat.speece@sbcglobal.net

Federation Director: Ruth Bailey (408) 248-6195

Alternate Federation Director:

Michael Paone (408) 340-3258

Directors (5)

Vito Cangemi (408) 356-6705

Gail Matthews (650) 962-9960

Marc Mullaney (408) 691-1584

Bill Spence (408) 398-7502

Karen Welder (408) 353-2675

Parliamentarian: Dean Welder (408) 353-2675

Historian

Links:

Our website: www.scvgms.org

We are members of the California Federation of Mineralogical Societies (CFMS). <http://www.cfmsinc.org/>

We are affiliated with the American Federation of Mineralogical Societies (AFMS) <http://amfed.org>

Membership requirements: Attendance at two general meetings within twelve months. Dues are \$10.00 per year. General meetings are normally held the fourth Tuesday of each month at 7:45 PM at 100 Belwood Gateway (The Cabana Club), Los Gatos, CA 95032 ---just south of Blossom Hill between Leigh Avenue and Harwood Road.

Society purpose: The purpose of the society is to foster an interest and appreciation for rocks and minerals by furthering knowledge of the earth sciences in our members and our community.

Breccia crew: Editor: Pat Speece; Proofreader: Daymond Speece; Paper Edition Mailer: Ruth Bailey; Webmaster: R.K. Owen

We are members of the California Federation of Mineralogical Societies (CFMS), and are therefore affiliated with the American Federation of Mineralogical Societies (AFMS).

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Groups and Services

Carvers, and Cutaways John Eichhorn (408) 749-0523 form spheres, sculptures, and make cabs

Donation Receiving Committee (DRC) If you have rocks, tools, or equipment you want to get rid of, call George or Jane Yamashita (408) 353-2982

Field Trips Dean Welder (408)353-2675 or fieldtrips@scvgms.org

Facet Cutters: Max Casey (408) 227-0526

Fossileers Gail Matthews (650) 962-9960

Librarian Jennifer House

Smithies Pat Speece. Group makes jewelry using torch, saw Pat (408) 266-4327

Mineraleers Chuck Boblenz (408) 734-2473 Group studies and handles specimens.

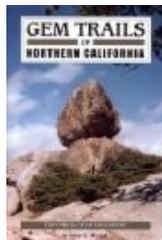
Jewelers Marc Mullaney 408-691-1584

Webmaster R.K. Owen

BRECCIA Editor
Pat Speece
2357 Loma Park Court
San Jose, CA 9512

Books

- ◆ collecting guides
- ◆ jewelry making
- ◆ geology
- ◆ up to **40%** off retail
for SCVGMS members



Tools

- ◆ gem scoop
- ◆ hammers
- ◆ grit



Dean & Karen Welder
Members SCVGMS

www.peregrine-rocks.com