

Santa Clara Valley Gem and Mineral Society

Send Exchange Bulletins to:
June Harris
107 Dell Way
Scotts Valley, CA 95066



Please Deliver Promptly

BRECCIA

Santa Clara Valley
Gem and Mineral Society



All American Club

Volume 53
Number 7

San Jose, CA
July, 2006

SCVGMS ELECTED OFFICERS

President: John Eichhorn
(408) 749-0523
Vice President: Marc Mullaney
(408) 691-1584
Secretary: Randy Harris
(831) 438-5150
Treasurer: Frank Mullaney
(408) 266-1791
Editor: June Harris
(831) 438-5150
Federation Director: Ruth Bailey
(408) 248-6195
Alternate Fed. Director: Frank Monez
(408) 578-7067
Directors:
Bill Gissler (408) 241-0477
Larry Moore (650) 941-4966
Pat Speece (408) 266-4327
Lynn Toschi (408) 353-3323
Jane Yamashita (408) 353-2982
Historian: Anna Windsor
(408) 926-8624
Parliamentarian: OPEN

SCVGMS COMMITTEE HEADS

Field Trip Committee Coordinator:
Adam Yamashita
Field Trip Committee: John Eichhorn,
Randy and June Harris, Jennifer
House
Founder's Day Picnic Food:
June and Randy Harris,
Jane and George Yamashita
Founder's Day Picnic Raffle: Pat Speece
Founder's Day Bingo: John Eichhorn
Hospitality: Rich and Niki Santone
Installation Dinner: Kathy McChristian
Juniors: Mark and Debbie Wartenberg,
Gary and Kathy McChristian
Librarians: June Warne and Nancy Boring
Member Display: Kelly Van Vleck
PLAC: (Public Lands Advisory Committee)
Frank Monez
Program: Bill Gissler
Refreshments: Claire Ferguson
Sergeant-at-arms: Hershall Boring
Show 2006: Marc Mullaney
Show 2007: OPEN
Silent Auction: John and Sylvia Palmieri
Social Committee:
June Harris, Claire Ferguson
Sunshine: Ernestine Smith
Trailer Custodian: Herb Vogel
Trophies: Frank Mullaney
Webmaster: RK Owen

Santa Clara Valley Gem and Mineral Society

P.O. Box 54, San Jose, CA 95103-0054

Website: www.scvgms.org

Email: info@scvgms.org

Phone Number (408) 265-1422

An Invitation

This society is pleased to invite guests to attend general meetings, study groups, and field trips. General meetings are normally held the fourth Tuesday of every month at 7:45 PM at 100 Belwood Gateway (The Cabana Club), Los Gatos, CA 95032. Belwood Gateway is just south of Blossom Hill Road between Leigh Avenue and Harwood Road.

Our next general meeting will be on July 25, 2006 at the Cabana Club, 100 Belwood Gateway, Los Gatos, CA 95032 at 7:45 PM.

Our next board meeting will be on July 27, 2006 at Bill Gissler's home at 1075 Blossom Drive, Santa Clara, CA 95050 (408) 241-0477 at 7:30 PM.

Our Society's Purpose: The inculcation of a love of rocks and minerals by the furtherance of members' interests in the earth sciences and by education in all facets of related educational activities with the promotion of good fellowship, proper ethics, and conduct.

Our Membership Requirements: Attendance at two general meetings within twelve months. This society is a member of the California Federation of Mineralogical Societies (CFMS) and is affiliated with the American Federation of Mineralogical Societies (AFMS). Dues are \$10.00 per year.

Our Newsletter, the Breccia, is published monthly. The deadline for most articles is the Sunday before the regular meeting. The Breccia Editor is June Harris who may be contacted via email at juneconeyharris@yahoo.com or by phone at (831) 438-5150. The Breccia is proofread by Linda Spencer. Ruth Bailey and Bill Norton handle all aspects of mailing. Exchange Bulletins may be sent to June Harris at the following address: 107 Dell Way, Scotts Valley, CA 95066. Permission to copy is freely granted to American Federation of Mineralogical Societies (AFMS) affiliated clubs when proper credit is given.

Study Group Leaders

For information on a study group, please call the leader(s) listed below

Carvers	Herb Vogel	(408) 247-1018
Cutaways	John Eichhorn	(408) 749-0523
Facet Cutters	Bill Norton	(408) 356-8254
Fossileers	Gail Mathews	(650) 962-9960
Juniors	Mark Wartenberg	(650) 568-6114
Mineraleers	Chuck Boblenz	(408) 734-2473
Smithies	Kelly Van Vleck &	(408) 262-8187
	Pat Speece	(408) 266-4327
Stringers	Pat Speece	(408) 266-4327

John's Note

Our annual picnic is July 16th. We need raffle and bingo prizes, so bring anything you think would make an interesting gift. Don't forget a side dish.

It looks like the bus trip to the CFMS show was enjoyed by everyone. Clair Ferguson and Herb Vogel, with Frank Mullaney's help, made for a well organized ride and refreshments. Gail Matthews gave an informative fossil tour through the cases and displays, which ended at the sea monster and sea shell exhibit. The owner of the exhibit heard Gail's talk and eagerly continued on with details of his fossil display. He was proud of his excellent exhibit. A big thank you to all who made the trip enjoyable. The only trouble was the day was too short.

The USGS open house in Menlo Park was excellent. The displays, movies, talks, and exhibits were great. An interesting display was the deep hole drill project on the San Andreas fault in Parkfield, CA. They found marine shell fossils, which lived in 200 to 1000 feet of water, buried in the rock at 13,000 feet deep! Something has been movin....

Check out the field trip on Aug. 20th to the Spider mine. This would be a good caravan trip. Anybody interested?

Thanks,
John Eichhorn

**Founder's Day Picnic
July 16, 2006
at the Cabana Club
Meal at noon
Reservation required and
must be made by July 9
by calling June Harris
(831) 438-5150
or mailing reservation
form. Forms may
be found online at
our club website
www.scvgms.org
or in the May Breccia**

**Don't forget!!
Bring rocks, plants, etc.
for prizes for Bingo
at the Founder's
Day Picnic.**

Founder's Day Picnic Raffle

During our annual free picnic, we raffle off many items. Picnickers may purchase one or two tickets at fifty cents each. During the raffle, one item is displayed, then a name is drawn, and the winner is announced and given the prize. We need prizes to give! Though rock related items are preferred, anything prize-worthy in excellent condition is welcome. Please get your donations to me either before or during the picnic. Everything is appreciated.

Thanks. Pat Speece

**Rock Sale
July 16
10:30 -12:00
at the
Cabana Club
before
the Founder's
Day Picnic**

Wanted!!

A committee has been formed to handle donations of rock and equipment to our club. If you would like to help with this committee, call George Yamashita (408) 353-2982 or Randy Harris (831) 438-5150. George and Randy are the co-chairmen of the committee. They are looking for two people to be a record-keeper and a banker. Jobs can be shared. Interested? Call today.

Check out what our study groups are doing!!!



Silversmithing by Kelly Van Vleck and Pat Speece

Smithies get preview of coming attractions. Smithies convened for their Mandatory Pre-meeting to learn about the skills and projects they would make during the four-week class. Class meets on mostly Mondays and Tuesdays from 7 - 10pm.

We will make broomcastings and a pendant using our castings the first week. Next we will reticulate silver and use our reticulated silver in a pendant. During our third week, we will learn stamping and solder inlay and use our solder inlay in a pendant. In our last week, we will drop molten silver into water for water casting and incorporate the results into a pendant. After all that, we will celebrate during our traditional Munchie Meeting.

IFaceters

There will not be a Faceters meeting during the month of July due to the holiday weekend. Look at next month's Breccia, for upcoming meeting information.

Stringers 1 & 2 by Pat Speece



After mastering two types of earrings, we decided that another earring meeting wasn't necessary. Everyone was able to make several pairs of each type. Therefore, we are going right into Linda's Bracelet which uses wire, then onto the Wave Bracelet for our August meetings. Both type bracelets offer lots of variation possibilities. Ask a Stringer to show you what they've done.

They all do a pretty nice job! We will have a show and tell after our last project. For information, email me at sparkylarky@sbcglobal.net.



CUTAWAYS

No meeting in July. If you'd like to use the Shoup Park facility, please contact John Eichhorn, (408) 749-0523; Gail Matthews, (650) 962-9960; or Jennifer House, (408) 243-7025. The facility is open most Saturdays at 10 AM. Call for confirmation. The next regularly scheduled meeting for the cutaways is August 5 at 10-1 at Shoup Park.

THANK YOU

Thanks to John Eichhorn and the Board, we now have jewelers' benches which are quite a bit higher than our old kitchen table and children's desks.

WANTED

The Smithies need chairs that can be raised or lowered. If the chair swiveled and was on wheels, it would be a plus. Good looks are not necessary. Please contact Pat Speece 408-266-4327 or sparkylarky@sbcglobal.net if you have one to donate.

**Second Notice:
Dues are overdue!!!
Please send your check
for \$10.00 per adult
member and \$3.00 per
junior member to:
SCVGMS Treasurer,
Frank Mullaney
5705 Begonia Drive
San Jose, CA 95124**

Member Displays By Kelly Van Vleck

There were no member displays at the June meeting. The following people are requested to bring a member display to the July meeting: Jim and Diana Nelson, Bill and Margaret Norton, Paul Nowicki, the Owen Family, John and Sylvia Palmieri, Howard Perry, Mike Perry, Claudia Peterson, and Ted and Kathi Peverini. Also anyone who has Sedimentary or Vein Agate and would like to bring some to enhance our program is asked to bring it, as well.

Member News

We have six new members this month. Let's make sure they feel welcome and are invited to some study group meetings this fall.

Jim Zeigler, 2806 Addison Place, Santa Clara, CA, 95051, (408) 528-4907. Jim's email is Zig888@sbcglobal.net. Jim is interested in cutting, polishing, collecting, faceting, geology, minerals, wire wrapping, lapidary, and fluorescent minerals.

Jennifer Le, 2806 Addison Place, Santa Clara, CA, 95051, (408) 528-4907. Jennifer's email is JDLE88@sbcglobal.net. She is interested in cutting, polishing, collecting, faceting, geology, minerals, wire wrapping, and silversmithing.

Frank Santos, 10730 Center Ave., Gilroy, CA 95020 (408) 848-5351. Frank's email is gracesan@pacbell.net. Frank is interested in cutting, polishing, collecting, silversmithing, and carving.

Grace Santos, 10730 Center Ave., Gilroy, CA 95020 (408) 848-5598. Grace's email is gracesan@pacbell.net. Grace is interested in cutting, polishing, collecting, silversmithing, beading, and carving.

Eileen Ferner, 350 Palomino Lane, San Martin, CA 95046 (408) 683-2519. Eileen is interested in cutting, polishing, collecting, and field trips.

Ed Ferner, 350 Palomino Lane, San Martin, CA 95046 (408) 683-2519. Ed's email is Ferner80@hotmail.com. Ed is interested in cutting, polishing, collecting, silversmithing, and field trips.

Welcome to all of you.

SUNSHINE

Eva Surrell has had her surgeries in hopes of regulating the Parkinson's Disease. Her hair had to be shaved off, and is about a half inch long now. She says she is going to wear her hair like the actress, Judi Dench. She hopes to make the July picnic. Our thoughts and best wishes are with Eva, John, and Matt during this period of the adjustments after her surgery.

John Bahr and Suzi Papineau were recently married. Congratulations and best wishes.

Rich Santone's father passed away last month. Our heartfelt sympathies are extended to Rich, Niki (Rich's daughter), and Rich's mother, Mrs. Santone.

Julaine Mullaney reported that she recently visited Alice McCammon. Julaine said that Alice is getting along well.

If you have information concerning any member who is ill, hospitalized, or has had a death in the family, please contact our new sunshine person, Ernestine Smith, (408) 395-5035.

July Program Sedimentary and Vein Agates

Sedimentary and Vein Agates will be the SCVG&MS meeting program for July 2006. Of the estimated one thousand kinds of agate found around the world, relatively few occur in sedimentary rock or in veins. This program will explore the characteristics and varieties of sedimentary and vein agates from South Dakota and other localities in the U.S. and around the world.

SCVGMS Calendar



July 12 Stringers meeting at Pat Speece's home from 7-10 (408) 266-4327

July 16 Founder's Day Picnic, reservations required. Reservation form on the Website www.scvgms.org Deadline: July 9

July 25 *Regular business meeting*

July 26 Stringers meeting at Pat Speece's home from 7-10 (408) 266-4327

July 27 Board meeting at Bill Gissler's home (408) 241-0477.

August 5 Cutaway Study group meeting at Shoup Park 10-1. Call John Eichhorn for information (408) 749-0523

August 9 Stringers meeting at Pat Speece's home from 7-10 (408) 266-4327

August 22 *BBQ/ Potluck at 6:30 Regular business meeting at 7:45*

August 23 Stringers meeting at Pat Speece's home from 7-10 (408) 266-4327

August 24 Board meeting at Larry Moore's home (650) 941-4966

September 11 Mineraleers meeting at Chuck Boblenz' home (408) 734-2473

September 26 *Regular business meeting*

September 28 Board meeting at Lynn Toschi's home (408) 353-3323

September 30 Club field trip to Monterey Bay Aquarium and Pacific Grove Natural History Museum

October 21 Club field trip to Clear Creek

October 24 *Regular business meeting*

October 26 Board meeting at Frank Monez's home (408) 578-7067

November 28 *Regular business meeting, election of officers, and Silent Auction at 7:45*

November 30 Board meeting at John Eichhorn's home (408) 749-0523

December 5 Installation Dinner at the Three Flames Restaurant. Please remember to bring an unwrapped toy to donate to Toys for Tots.

December 7 Combined Board Meeting at Pat Speece's home (408) 266-4327

Upcoming Field Trip Opportunities

Contact Adam Yamashita (831) 335-9460 or John Eichhorn (408) 749-0523 for information about the field trips below. Adam or John will make the appropriate introductions for you to be able to attend.

July 15-16 Elko NV for fossils and petrified wood.

July 15-16 Elbow Junction CA for petrified wood and agate

August 12-13 Lakeview OR Tallman Show and Field trips

August 20 West of Red Bluff, Spider Mine for rhodonite

Aug 21-24 Virgin Valley NV for opal

Sept 2-4 Cedarville CA for petrified wood, fossil leaves, agate, and obsidian

Sept 8-10 Black Rock Desert for geodes, Christmas Jasper, Black Rock Agate, petrified wood, and fossil leaves.

Sept 30 Pacific Grove Natural History Museum and Monterey Bay Aquarium.

Oct 2-6 Petrified Forest National Park AZ

Oct 7 Soapstone Ridge CA for soapstone

Oct 14-15 Searles Lake, Trona, CA for halite, hanksite, and other minerals

October 21 to Clear Creek for Jade, Plasma Agate, Selenite Roses, and Marcasite.

Hubba Hubba for Joe Schmoe

By Cathy Gaber, AFMS Club Rockhound of the Year
Via AFMS May 2006 newsletter

When was the last time someone in your club was recognized for contributions to the club? It's mid-March and I have only seven AFMS Club Rockhounds of the Year for 2006. That averages out to one per federation (though 2 federations actually have no submissions). Is there only one person in your federation who deserves to be thanked? I don't think so!!!

Think for just a moment. Is one of your officers doing an outstanding job? Has your shop foreman or field trip director opened new horizons. Has one of your members given a special program or worked with kids? Is there someone who is always there, always willing to pitch in with anything that needs doing? How about your show chair, your librarian, your hospitality chair or your sunshine person? A club can not function without the efforts of people like this. Why not take five minutes to show them that you appreciate their efforts. Submissions need to include the name of

article continued on page 9

CFMS Show Schedule

Changes to this calendar are printed in italics. For the latest version of the CFMS Show Schedule go to www.cfmsinc.org



July 1-2 2006, Culver City, CA Culver City rock & Mineral Club Culver City Veteran's Memorial Complex Culver City Veteran's Memorial Auditorium 4117 Overland Avenue Hours: Sat. 10 - 6; Sun. 10 - 5 Website: CulverCityRocks.org Richard Shaffer (310) 391-8429 Email: maryellenandrick@aol.com

August 4-6 2006, Nipomo, CA Orcutt Mineral Society "Earth's Treasures" St. Joseph's Church 298 South Thompson Avenue Hours: 10 - 5 daily Wes Lingerfelt (805) 929-3788

August 5-6 2006, San Francisco, CA *San Francisco Gem & Mineral Society San Francisco County Fair Building Ninth Avenue & Lincoln Way Hours: Sat. 10 - 6; Sun. 10-5 Ellen Nott (415) 564-4230*

September 1-4 2006, Fort Bragg, CA *Mendocino Coast Gem & Mineral Society Town Hall, Main & Laurel Hours: Fri - Sun. 10 - 6; Mon. 10 - 4 Don McDonell (707) 964-3116*

September 16-17 2006, Paso Robles, CA Santa Lucia Rockhounds Pioneer Park and Museum 2010 Riverside Avenue Hours: 10 - 5 both days Joyce Baird (805) 462-9544 Email: liloysee@charter.net

September 23-24 2006, Carmel, CA *Carmel Valley Gem & Mineral Society Monterey Fairgrounds 2004 Fairgrounds Road Hours: Sat. 10 - 6; Sun. 10 - 5 Sky Paston (831) 755-7741 Email: sky@familystones.net Website: www.cvgms.org*

September 22, 23, 24 2006, San Bernardino, CA *Orange Belt Mineralogical Society 6th Annual Rock, Gem, & Jewelry Tailgate Ball Park 6707 Little League Drive in San Bernardino Hours: Fri./Sat. 9 - 6; Sun. 9 - 4 Mike Woolery (909) 882-6806 Al Carrell (951) 961-5988*

September 23-24 2006, Downey, CA Delvers Gem & Mineral Society Woman's Club of Downey 9813 Paramount Blvd Hours: Sat. 10 - 6; Sun. 10 - 4 Teresa Widdison (562) 867-1521 Email: twiddison72@aol.com

September 23-24 2006, Monterey, CA Carmel Valley Gem & Mineral Society Monterey Fairgrounds 2004 Fairgrounds Road Hours: Sat. 10 - 6; Sun. 10 - 5 Sky Paxton (831) 755-7741 Email: sky@familystones.net

September 23-24 2006, San Diego, CA San Diego Lapidary Society Bernardo Winery 13330 Paseo Del Verano Norte Rancho Bernardo Hours: 10 - 4 both days Kim Hutsell; (619) 294-3914 Website: www.sandiegolapidarysociety.org

October 1 2006, Falbrook, CA *Falbrook Gem & Mineral Society 123 W. Alva (FGMS Headquarters) Hours: 10 - 4 Club Web Site: www.fgms.org There is a map on web site Janice Bricker (760) 728-1333*

October 14-15 2006, Grass Valley, CA Nevada County Gem & Mineral Earth's Treasures Nevada County Fairgrounds 11228 MC Courtney Road Hours: 10 - 4 both days Cliff Swenson (530) 272-3752

October 14-15 2006, Trona, CA Searles Lake Gem & Mineral Society "Gem-o-Rama" Searles Lake Gem & Mineral 13337 Main Street Hours: Sat. 7:30 - 5; Sun. 7:30 - 4 Bonnie Fairchild (760) 372-5356 Email: jbfairchild@verizon.net

October 14 2006, West Hills, CA *Woodland Hills Rock Chippers Eighth Annual Gem & Mineral Show 22700 Sherman Way Hours: 10 - 5 Virginia Rotramel (818) 790-7598 Email show@rockchippers.org*

October 21-22 2006, Anderson, CA Shasta Gem & Mineral Society Shasta District Fairgrounds Hours: Sat 10-5 Sun 10-4 Alex Stoltz (530) 474-4400

October 21-22 2006, Whittier, CA Whittier Gem & Mineral Society Whittier Community Center 7630 Washington Avenue Hours: 10 - 5 both days Jay Valle (626) 934-9764 Email res19pnb@verizon.net

October 28-29 2006, Stockton, CA Stockton Lapidary & Mineral Club San Joaquin County Fairgrounds 1658 Airport Way Hours: sat. 10 - 5; sun. 10 - 4 Jim Dunlap (209) 478-0747 Show Website: www.Stocktonlapidary.com

October 28-29 2006, Vista, CA Vista Gem & Mineral Society 1200 Vale Terrace Hours: Sat. 10 - 5; Sun. 10 - 4 Mary Anne Mital (760) 758-4599

November 4-5 2006, Concord, CA Contra Costa Mineral & Gem Society Centre Concord; 5298 Clayton Road Hours: 10 - 5 each day Bill McKay (925) 439-8195 Email: williammckay@hotmail.com

November 4-5 2006, Lancaster, CA Palmdale Gem & Mineral Club "Rock n Gem Roundup" Antelope Valley Fairgrounds 2551 West Avenue H Hours: 9 - 5 both days Susan Walblom (661) 943-1861 Rodney Shillings (661) 400-5198 Email: slchaisson@yahoo.com Website: pgmc@antelecom.net

November 4-5 2006, Ridgecrest, CA Indian Wells Gem & Mineral Society Desert Empire Fairgrounds Call (760) 375-8000 for RV parking 520 S. Richmond Road Hours: 9 - 5 both days John De Rosa (760) 375-7905

November 4-5 2006, San Diego, CA San Diego Mineral & Gem Society Al Bahr Shrine Center (behind Hampton Inn) 5440 Kearny Mesa Road Hours: Sat. 9:30 - 5; Sun. 10 - 4 Wayne Moorhead (858) 586-1637

November 10-12 2006, Sacramento, CA Sacramento Mineral Society 64th. Annual "Harvest of Gems" Scottish Rite Center 6151 H Street Hours: Fri. 9 - 5; Sat. 10 - 6; Sun. 10 - 4 Sheldon Shuper (916) 383-9153 Email: jfosback@aol.com

November 11-12 2006, Yuba City, CA Sutter Buttes Gem & Mineral Yuba Sutter Fairgrounds (Franklin Hall) 442 Franklin Avenue Hours: 9 - 4 both days Cliff Swenson (530) 272-3752

November 18-19 2006, Livermore, CA Livermore Valley Lithophiles The Barn; 3131 Pacific Avenue Hours: Sat. 10 - 6; Sun. 10 - 5 Joyce & Dick Friesen (925) 447-8223 Email: friesenjoyce@ixinet.com

November 18-19 2006, Oxnard, CA Oxnard Gem & Mineral Society Oxnard Performing Arts Center 800 Hobson Way Hours: Sat. 9 - 5; Sun. 9 - 4 Norb Kinsler (805) 644-6450 Show website: www.ogms.net

November 18-19 2006, Victorville, CA Victor Valley Gem & Mineral Club San Bernardino County Fairgrounds 14800 7th Street Hours: Sat. 9 - 5; Sun. 9 - 4 Jo Ann McPurdy (760) 217-2628 Website: www.gbeal5084@aol.com

November 25-26 2006, Barstow, CA *Mojave Desert Gem & Mineral Society Barstow Community Center 841 Barstow Road Hours: 10 - 5 both days Gene Haines (760) 256-0595*

December 2-3 2006, Orangevale, CA American River Gem & Mineral Society Orangevale Grange 5805 Walnut Avenue (near Madison Avenue) Hours: 10 - 5 both days Evelyn Tipton (916) 372-3452 Email ektipton@charter.net

Other 2006 Federation Shows

South Central Federation (SCMS) August 18-20, 2006 Bossier City, LA

Northwest Federation (NFMS) July 14-16, 2006 Kelso, WA

Eastern Federation (EFMS) November 18-19, 2006 West Palm Beach, FL

Southeast Federation (SFMS) - AFMS August 14-20, 2006 Nashville, TN Middle Tennessee Gem & Mineral Society Convention 15 - 20 - Show 18 - 20 Hotel Preston - 733 Briley Parkway Tennessee State Fairgrounds Creative Arts Bldg; Wedgewood Avenue Show hours: Fri./Sat. 9 - 6; Sun. 10 - 5 Lewis Elrod (615) 893-8270 Email: lfelrod@yahoo.com

California Federation Report by Ruth Bailey

The recent Federation Directors' meeting was held at the show and convention hosted by the Calaveras Gem & Mineral Society at Angels Camp. There was a good attendance for a great show which had the weather they had prayed for. We had a good group there who had ridden on the bus from Santa Clara. I saw several members, but I know I missed a good many of you. I hope you all had a fabulous time.

The meeting was well attended and was finished by noon, so the attendees had some free time in the afternoon. The show committee reported that the show preparations had gone well and they had had a lot of help from persons outside their club.

The Palmdale Gem & Mineral Society gave a preview of next year's show which will be held at the new fairgrounds in Lancaster. The show will be on June 15-17, 2007, and more information will be in the CFMS Newsletter.

The Directors elected two persons as Honorary Members of CFMS. The first electee is Dr. William S. Wise, Professor Emeritus, of the University of California at Santa Barbara. Also, I believe that Dr. Wise was an Honorary Award winner of the AFMS Scholarship. The other electee is Bob Jones, Senior Editor of the Rock & Gem magazine. Bob has helped a lot of our Societies at their Federation shows and has presented programs at ZZYX several times.

The Earth Science Studies committee reported that ZZYX will be held on March 18-25 in 2007, and the price will be increased to \$300.00 per person. This is due to an increase from the University. The meetings at Camp Paradise will be held on September 3-9 and 10-16, as previously reported. However, the camp has been sold to another group, and it is quite possible that it will be necessary for us to find another location for future sessions.

Dee Holland, President of the AFMS Scholarship Foundation, presented us with a certificate for our donation to the AFMS Scholarship Foundation, stating that we have achieved a 1200% status. This indicates that, over the years the Scholarship has been in operation, we have donated \$1.00 for each member 12 times.

The CFMS Scholarship Committee reported that they would like to receive names of persons who have contributed to the work of the Federation and would be worthy recipients of a CFMS Scholarship Honorary Award. This award would entitle them to select a school to give a scholarship to a student. If you would like to nominate a person for this honor, let me know, and I can tell you how to do so.

The increase in competition entries was great, and we had a total of 30 entries. There were a number of trophies awarded at the banquet on Saturday evening.

Proposed Bylaws Changes

The Finance Committee met on May 17, 2006, and we would like to propose the following changes in the Bylaws to define and add to the Endowment Fund.

The Endowment Fund coverage presently reads as follows:

Article IX, Miscellaneous

Section 5. The Endowment Fund is a permanent restricted account which shall accumulate funds to provide income for the Society. Only earnings may be used for expenses as approved by the Board of Directors.

This is included in Article IX, Miscellaneous, and we would like to propose the following wording:

Article IX, Miscellaneous

Section 5. Endowment Fund

Purpose: A restricted reserve for the purpose of providing operating funds during the year, utilizing only the income or interest from the account.

The Endowment Fund is the amount which is currently in the Dodge and Cox Balanced Fund. Interest or income not utilized during the fiscal year becomes a part of the permanent fund.

Use of the Endowment Fund principal: Use of these funds can only be authorized by a 2/3 vote of the membership present at a regular meeting, as governed per Article VIII of the Bylaws.

As this is a change to the Bylaws it will be necessary for this to be presented to the membership at a regular meeting. It can be voted on at the next regular meeting and requires a 2/3 vote for passage.

Finance Committee,
John Eichhorn, Ruth Bailey, & Marc Mul-laney

Summer Vehicle Safety by Bill Klose, AFMS Safety Chair

Spring is now officially with us and rock hounds hearts turn to field trips, rock shows, and other outdoor activities involving the family vehicle. In order to arrive safely, it must be prepared for the trip and piloted safely. Prior to leaving on a trip, make sure your vehicle is in good mechanical condition. Service the engine and make sure the brakes are in excellent condition. This may require a tune up, oil change, and brake adjustment or pad/puck replacement.

Check the tires for wear and proper air pressure, including the spare tire or "donut". If the tires show wear, rotate or replace them. A wheel alignment may be prudent if it appears that misalignment is the cause of uneven tire wear. If you are going to be traveling over long distances without services or on rural roads, especially rutted dirt roads, it may be advisable to replace the "donut" with a full sized spare tire. This will provide the ability to reach services that are further away than the recommended range and speed for the "donut" and will provide higher ground clearance for your vehicle on rutted roads, especially with the loads that rock hounds are known to carry. The tires should always be fully inflated. Soft tires provide a smoother ride, but will heat up and may fail in hot weather. Do not exceed your vehicle's tire, spring, and towing load limits.

Make sure your windshield wipers are in good working condition and the inside and outside of the windshield and other windows are clean. Adjust the seat headrests to the level of your ears, not to the lower area of your head or curvature of your neck. Ensure that the seat belts and children's safety seats are in good working condition and properly installed in accordance with the manufacturer's instructions. Make sure your headlights are properly adjusted and clean and wipers are working if installed. Adjust your mirrors so as to reduce the "blind zones". It may be advisable to replace the inside rear view mirror with a wider type to improve rearward visibility. Avoid buying vehicles with dark tinted windows which can impair visibility. An oil change and lube will improve engine performance and mileage.

Check the supplies in the car for bottled water, a tire iron with lug nut key (if anti-theft lug nuts are installed on your vehicle), jack, flashlight with extra batteries, emergency flasher or triangle, and blanket. Extra brake fluid, engine oil, windshield wiper fluid, and transmission fluid are recommended, as well as an emergency tool kit, first aid kit and cell phone with spare cell phone battery or cigarette lighter cell phone charger.

Plan your trip before heading out, so you can concentrate on driving, not navigating. Have the maps and travel guides available in the vehicle and have someone else familiar with them to aid with navigation if the need should arise to reduce driver distraction. Make reservations in advance and plan the trip so that each day's activities will not exhaust the driver. Provide for frequent stops to rest the driver and if possible share the driving responsibilities. AARP recommends that if you are planning to take an unfamiliar route at night, try making a trial run during daylight. Avoid driving in heavily traveled or high speed areas during rush hour and bad weather.

Make sure that your prescription glasses are current and that you have both clear and tinted glasses with you as well as any prescription medicines. Carry something to eat, like energy

bars, and drink, in case you are marooned alongside an isolated highway for a period of time.

Once you are on the road, keep a safe distance (three second rule) behind the vehicle ahead of you. If you are going to change lanes, signal well in advance and look in the inside and outside rear view mirrors and over your shoulder before making your move, to avoid not seeing a vehicle in the blind area in the rear quarter area of your vehicle. When passing, provide adequate space and use your turn signals prior to pulling back over into the travel lane. Do not travel in the passing lane. Do not talk on the cell phone, eat, or engage in any other activity that will distract you or keep you from having both hands on the steering wheel.

Use your headlights at least one half hour before sunset until one half hour after sunrise and whenever there is poor visibility or rain. Keep the radio volume down and be alert for emergency vehicle's flashing lights or audio warnings. Use your seat belts and keep at least 10 inches from the vehicle air bags.

If your vehicle should have a flat tire or other casualty, get as far off the pavement as possible and put out a flare, flasher, or emergency triangle, so others can see you. It is better to drive a short distance on a flat tire to get the vehicle out of traffic danger. If it is not safe to change the tire or repair the vehicle yourself, call for help.

When traveling with trucks, drive so you can see the truck's rear view mirror, to ensure that the driver can see you. When stopped at a traffic signal or stop sign, especially on up grades, stay back from the vehicle ahead to allow for possible roll back when starting out, which is quite common with standard transmissions.

Do not encourage road rage by making gestures, looking at other drivers, or exhibiting aggressive driving habits. If you should be pursued by another driver, proceed to a populated area, preferably a police station. Do not go to your home and do not get out of your vehicle. Always be alert for the unexpected. from AFMS Newsletter, 5/05; via BEMS Tumbler, 5/06

Hubba, Hubba,... continued from page 6
the exceptional member (or couple), the name of the club, the federation, the name of the submitter and, if applicable, any office held. Anyone in the club can submit, first come, first serve. Don't forget juniors! They get their own chance to be named AFMS Junior Rockhound of the Year. Please include the age of any junior submission. Each club can submit a name for both adults and juniors every year.

Send this information to me if you are in the Eastern Federation. Send it to your Federation representative in other federations. Do it now! Everyone submitted will have their information printed in their regional federation newsletter and the AFMS newsletter. They will also have their name on the list as part of the AFMS convention record. It is a special way to show everyone how important these people are.

Cathy Gaber <bg@his.com>

Rare Mammal Tracks in Golden

By Dennis Gertenbach,

as reported in *The Flatirons Facets*, May-June, 2006; via The Lodestone May 2006

Martin Lockley of the University of Colorado at Denver reported in the paleontology journal *Ichnos* rare mammal tracks at the Fossil Trace Golf Course in Golden, Colorado. The tracks were made about 68 million years ago by a mammal the size of a rat. They consist of five regularly spaced tracks. Each four-toed foot track is about three-quarters of an inch in length. Dr. Lockley determined that the tracks were most likely made by a hopping animal.

These tracks, along with similar tracks found near Rifle, Colorado, are the only mammal tracks from the dinosaur age found in the Western United States. Only two other sites in the world--in Maryland and Argentina--have mammal tracks from the age of dinosaurs.

The site is open to visitors and the mammal tracks are marked along the Triceratops Trail in Golden. Details and a map of the trail, which is about 1/2 mile long, can be found at <http://www.dinoridge.org/programs/triceratopstrail.htm>. The trail also has tracks of several dinosaur species and bird tracks.

Shop Hints

7-up can be used to clean silver and gold findings. Just dip, shake, but rinse well, and rub with a soft cloth. Make certain to use different solutions for gold and silver. via Rockhound Special, 7/2005; via Rockytier, 7/05; Snoopy Gems, 1/04; Oregon Coast Agate, 11/02.

If you are running into trouble getting a good polish on turquoise, use a piece of organdy on the wheel. It seems to be more effective than felt. via Rockhound Special, 7/2005; via Rockytier, 7/05; Snoopy Gems, 1/04; Oregon Coast Agate, 11/02.

Candle your Montana agate just as you would eggs. Punch a small hole in the bottom of a two pound coffee can, turn it upside down and place a light inside. It is surprising how the light will show the dendrites. via Rockhound Special, 7/2005; via Rockytier, 7/05; Stoney Statements, 9/04

Sources for Information for Rockhounds

by C.E. Johnson

via Mendo Coast Gems, 3/2006; via The Slate, 4/2006

U.S. Geologic Survey office publish geologic maps, topographic maps and mineral maps, and reports and bulletins, on geology and minerals on any area in the country. Look in your phone book for the one nearest you and ask them what you need to do to order geologic maps and other information on the areas you are interested in. (They may be listed under the U.S. Dept. of the Interior). They will probably send you free information on what is available in those areas, along with their usual order forms and prices for the maps they sell.

If you have a computer, you may want to log onto the geologic survey's home page <usgs.gov> and follow the links to what you need.

U.S. Bureau of Land Management offices have maps and other publications handled in their "Lands & Minerals Dept." or "Minerals Resources Division", etc. Like the U.S.G.S., this BLM is under the jurisdiction of the U.S. Dept. of the Interior.

Many of the localities listed in the reports of these agencies and shown on their maps are not included in the usual rockhound guides and magazines. Also many of them are not only mines but have not been followed up by proper investigation by anyone, so those minerals are overlooked and are still there waiting, even though the reports are easily available to the public.

A great deal of rockhounding is done on National Forest land, so the **U.S. Forest Service** maps are indispensable when driving or hiking the forests. These maps can be purchased at any U.S. Forest Service office for a nominal fee.

Topographical Maps are a great help in many ways, and in remote areas no responsible rockhound should be without one. They outline hills and valley in elevation "contour" lines, and they distinguish forest cover from bare areas and show all creeks in detail, and they show any known trails in the region.

They also usually show mines and prospect diggings, but are more exact in their locations than the forest service maps because of the greater topography detail, especially on the more "close-up" scales usually available in this type map. Another advantage is that you can transfer geologic information from your geologic map onto a topographic map of the same scale, and more easily pinpoint the most favorable parts of the area to examine.

These maps are sold by many U.S. Geologic Survey offices, and by some stationary stores and sportsman's supplies stores.

AGATES

Agate is a banded, multicolored, variety of Chalcedony. It occurs in an infinite amount of colors and patterns, and no two Agates are alike. The extraordinary beauty and uniqueness of Agate is responsible for its great popularity. Agate must be polished to bring out its full charm; unpolished specimens are dull and ugly. It usually forms in rounded nodules or knobs, which must be sliced open to bring out the internal pattern hidden in the stone. Some varieties have two names that are equally used. Don't be surprised when you see the same definition for two different variety names. You will notice by some varieties that the word *Chalcedony* is used in the definition, instead of Agate (as is in the case in **Dendritic Agate**). This is NOT a mistake. These "varieties" are not really Agates, as they lack banding, and although they have the word agate in their name, are only a variety of Chalcedony. This list below cites only the well known and commonly used variety names.

Blue Lace Agate - Agate with light blue bands in a lacy or wavy pattern.

Botswana Agate - Agate from Botswana banded with fine, parallel lines, often with a preponderance of pink blending into white.

Brecciated Agate - Agate with broken fragments naturally cemented together

Cloud Agate - Grayish Agate with blurry, foggy patches of inclusions.

Crazy Lace Agate - Agate composed of twisting and turning bands of various colors.

Dendritic Agate - Chalcedony with tree-like or fern-like inclusions.

Enhydro Agate - Agate nodule partly filled with water. The water can be seen from the outside of the nodule when held up to the light. Also known as *Enhydritic Agate*.

Eye Agate - Agate with banded, concentric rings.

Fairburn Agate - Beautiful, unique, and rare; Fortification Agate from Fairburn, South Dakota.

Fire Agate - Agate with Goethite or Limonite inclusions, which cause the stone to be iridescent.

Fortification Agate - Agate with a pattern resembling a medieval fortress (i. e. imaginary moat and castle walls can be perceived).

Fossil Agate - Agate as a replacement of organic material.

Iris Agate - Iridescent Agate exhibiting all colors of the spectrum when sliced in thin slabs.

Laguna Agate - Beautiful and colorful type of Agate from Ojo Laguna, Chihuahua, Mexico.

Landscape Agate - Chalcedony with tree-like designs closely resembling scenery.

Mexican Lace Agate - Agate consisting of thin bands in a lacy or wavy pattern.

Moss Agate - Chalcedony with dense inclusions of green Hornblende.

Nipomo Agate - Agate with Marcasite inclusions found in Nipomo, California.

Onyx - Agate where the banding lines are straight and parallel, and consistent in band size.

Oregon Snakeskin Agate - White to cream Chalcedony with a wrinkled or cracked "skin", found in Oregon.

Plume Agate - Agate with inclusions in feather-like patterns.

Pom Pom Agate - Agate with yellow inclusions resembling pom poms.

Pseudo Agate - Agate as a replacement of organic material.

Rainbow Agate - Iridescent Agate exhibiting all colors of the spectrum when sliced in thin slabs.

Sardonyx - Agate with straight parallel bands of brownish to red alternating with white or black bands.

Sagenite Agate - Clear Chalcedony containing inclusions of other materials

Scenic Agate - Chalcedony with tree-like designs closely resembling scenery.

Snakeskin Agate - Reddish brown Agate with black concentric bands.

Star Agate - Agate with banding lines in the formation of a star.

Sweetwater Agate - Chalcedony with star-shaped patterns of manganese oxide inclusions, found in Sweetwater River, Wyoming.

Thunder Egg - Nodule filled with Agate in the center.

Tube Agate - Agate with tube-like formations which are sometimes hollow.

From The Agate Licker, 02/05; via The Burro Express, 03/05; via T-town Rockhound, 05/06

Tips and Hints

Dendrites are perhaps the most common geological oddity. They usually resemble a tiny fern frond. The term "dendritic" refers to a branching figure. They are usually formed in thin hard-bedded shale and limestone. Concentrations of black manganese oxide percolate into the cracks leaving behind dendrites".

via BEMS Tumbler, 5/06; via Gneiss Times, 4/06; via The Glacial Drifter, 5-6/96; from The Fossil Enquirer, 11/89

Did you know?

Jewelers recognize four organic substances as gemstones: Ivory, pearl, amber and coral. Other precious and semi-precious gems are considered minerals.

Via Rolling Stones Beacon 11/2004

The Question of Agate Escape Tubes

By Robert G. Welch, From the *Sooner Rockologist*, Nov. 2005; via *Gem Cutters News* 1/2006

One of the major controversies related to the origin of agate is whether the tubes seen in agate are entry tubes or escape tubes. Entry tubes develop successive bands; escape tubes relieve pressure that develops inside as the silica gel crystallizes.

The silica gel ($\text{SiO}_2 = \text{H}_2\text{O}$) theory was popularized by Dr. Roger Pabian and Dr. Andrejs Zarins in *Banded Agates Origins and Inclusions*.¹ In this publication they state, "The banding process is initiated when the silica gel comes into contact with alteration or weathering products of ash flow or basalt, or comes into contact with alkaline groundwater or alkaline surface water. Contact between these incompatible media sets up a concentric, electrochemical wave front similar to the Belousov-Zhabotinskii reaction. The chemical reaction results in spherulitic crystals of chalcedony precipitating from the gel. Impurities are expelled from the gel and collect in the troughs at the tips of these spherulitic crystals to form bands. This process continues until the gel becomes under saturated and the euhedral quartz precipitates. At this stage the silica gel is banded, but it is in a plastic state and the products have a lower specific gravity than the reactants; thus, water or any excess silica is squeezed from the agate, forming an outward directed escape tube. (Shaub, 1955)

Silica gel is composed of water with a density of 1.00 and silica, which in its crystalline state has a density of 2.71. Silica gels have been created in the laboratory with concentrations of 30% silica and 70% water. In nature they are probably more like 5% to 10% silica. Crystalline quartz is the densest form of silica that occurs in the upper several miles of the Earth's crust; therefore, the products of crystallization can not be less dense than the original gel. This density change cannot be the driving mechanism for escape tubes.

This discrepancy was apparently recognized by Bob Jones in his September 2005 article in *Rock and Gem* on Argentina's Condor agate. In this article he covers the various theories of agate formation, but chooses the gel theory as the one he supports. He attributes the hypothesized pressure within the vesicle to the heat of crystallization of quartz. He states in the article: "However, anyone observing an abundance of agate from all over the world, including Condor agates from Patagonia, sees instance after instance in which the distortions never reach the outer skin of the agate. This is visual proof that the band-forming material did not enter the agate through that channel, but rather the internal strife worked from the inside out. Therefore, these are escape tubes due to an internal function and are not formed from any outside influence. The distortion in the bandings surrounding the escape tube is additional proof of how such features from internal pressures, not by invasive action."

First I will address the pressure issue and later the

"proof". Anyone who has ever had a broken bone is familiar with the heat of crystallization. As the plaster dries, the gypsum in it crystallizes giving an uncomfortable warm feeling. Quartz would also heat slightly as it crystallizes, warming the vesicle from the natural rock temperature. No evidence was presented that this heat would cause the gel to boil, which would be necessary to increase the pressure significantly within the vesicle. The cooler rock surrounding the vesicle could also dissipate some of the heat. Although this mechanism is more plausible than the density change, much more evidence needs to be presented before it could be chosen for the hypothesized pressure. Bob Jones's proof overlooks two important points. First is that when you cut through an agate you are seldom at the perfect point to observe the entry or "escape tubes". In the example given, the tube changed direction slightly out of the plane of the cut leaving the impression that it terminated short of the edge of the agate. A three dimensional conclusion was arrived at from a two dimensional slice. Banding is also distorted in a two dimensions slice by the fact that they would not all be cut at exactly 90 degree angles to the bands. Secondly, what is hypothesized is not possible. For an escape tube to form there would have to be a pressure sink at the edge of the vesicle toward which the pressure is to be relieved. This would have to be an opening to the near atmospheric pressure outside the vesicle. As was pointed out by Brian Jackson of the National Museum of Scotland in his "History of Scottish Agate" presented at the "Symposium on Agate and Cryptocrystalline Quartz" in September 2005, the bands on the edges of the tubes are not disrupted, but become very thin at the edges of the tubes. This is probably a gravity effect on tubes at the top of the agate. Often other tubes do not exhibit this thinning, particularly when there is more than one tube penetrating into the agate. As the fluid flows in to the vesicle it would thin on the top side of the vesicle due to flow under the force of gravity.

It is interesting to me that the proponents of the gel theory have little or nothing to say about how the gel got into the vesicle. Since silica gels are viscous they cannot have seeped through the walls of the vesicle and would have difficulty even entering through a small opening. The silica would have had to enter through openings in the vesicle and would not yet have reached the viscous state when it occurred. Zarins (2005) during the "Symposium on Agate and Cryptocrystalline Quartz" partially addressed this question by stating that the silica gel would become more concentrated after it entered the vesicle. However; if a gel filled vesicle concentrated after entering, it would be through the loss of water and the whole mass would shrink, separate from the walls and be loose on the bottom of the vesicle. If another episode of gel occurred, it would then form around the previously formed agate, not inside of it.

My final point is that if the tubes were escape tubes, then there should always be just one tube in the agate. There are often more than one, which can only be explained by groundwater hydrogeology. If the pressure

was being relieved it should go in only one direction, to the point of lowest pressure. Also, the flow would not be from the center, as the lowest pressure would be at the point of exit. The flow at this point would be from all directions around the exit and would likely never extend to the center of the agate.

In conclusion, the tubes observed in agates cannot be exit tubes. Entry tubes are essential to bring the silica into the vesicle and are the cause of the features observed.

Baking Soda in the Field

Reprinted from Del Air Bulletin, 9/04; via Fresno Chips, 8/05; via American River Currents, 3/06; via Napa Gems, 6/06

Here are some reasons you will be glad you took a box of natural baking soda along on your field trip.

1. Insect bites, minor burns, and poison oak. Add water and make a paste and apply to affected area.
2. Sunburn, windburn, and prickly heat. Add 1/4 cup to a basin of water and bathe or apply with a sponge.
3. Acid indigestion. Add 1/4 teaspoon to 1/2 glass of water and drink slowly.
4. Tired Feet. Add 3 tablespoons to a basin of warm water and soak your toes.
5. Tooth cleanser and breath freshener. Use as much as needed on damp toothbrush
6. Hand and fingernail cleaner. Rub dry powder onto moistened hands to remove pitch, odors, grime, or grease.
7. Fire Extinguisher. For a grease fire, open and throw the contents of a box at the base of flames.
8. Freshening coolers, travel mugs, and thermos jugs. Add 2 teaspoons and partially fill with water. Shake and rinse.
9. Deodorant. Sprinkle some inside your boots or hiking shoes.
10. Safe, natural cleanser for camp dishes and pans. Add 3 tablespoons to a pan of warm water and soak.
11. Cleaning a dirty spattered windshield, chrome, and camper frames. Rub with a damp sponge sprinkled with baking soda.
12. Freshening RV water tanks. Flush with a solution of 1/4 cup of soda in 1 gallon of water. Rinse with clear, clean water.

Eleven Ways to Become a Fossil

—Author Unknown

FREEZING - This rare creature has suffered a minimum of change. His arteries may still contain dried blood, his stomach undigested food. Most common is the Ice-Age mammoth of Siberia and Alaska.

DRYING OR DESSICATION - If these organisms were thoroughly dried, they can be of high quality. Best known are the camels and sloths found in our Southwest caves.

WAX AND ASPHALT - Natural paraffin makes an excellent preservative, as proved by specimens found in Polish mines. The most famous asphalt fossils are still embedded in the La Brea Tar Pits in California.

SIMPLE BURIAL - English bogs are famous for their buried forests. Sand dollars, sea urchins, and mollusks have been preserved by this method for up to 75 million years.

CARBONIZATION - Incomplete decay of volatile substances leaves carbon behind, sometimes reducing organisms to paper-thin layers of shiny black film that reveal much detail.

PETRIFICATION - Our common stony fossils got that way by permineralization, the replacement of the structure by dissolved minerals, or secondary replacement, such as when limey fossils are dissolved and replaced by silica.

MOLDS AND CASTS - Natural molds in sediment remain after organisms decay. Sandstone beds reveal molds of shells and trees, and the finest molds are Northern European amber, which has perfectly preserved the forms of insects.

IMPRINTS - Sandstone, shale and tuff reveal external molds of very thin objects such as leaves. Best known of these are the Illinois Coal-Age plant imprints.

TRACKS, TRAILS, BURROWS - Dinosaur prints are the most famous of these. But Nebraska's "Devil's Corkscrew" once housed a beaver who dug an eight-foot spiral hole.

CASTINGS & COPROLITES - Ancient worms swallowed sand to help digest small organisms; they regurgitated these casings. Coprolite is a polite word for petrified "dung".

GASTROLITHS - Many ancient reptiles ground their food with these stones (as do our modern fowl). The stones are rounded, smooth, and even polished at times. Also known as "Gizzard Stones".

--From Paleo Newsletter, April 2001; via Chipper's Chatter, May 2006; via Shin Skinner News, June 2006

Question of the Month - Glass

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas
via Chips and Chatter, July 2006 edition

What is OBSIDIAN?

As with last month, the answer to this question ought to be easy, particularly since the basic answer was in last month's article. OBSIDIAN is natural glass.

Obsidian is usually high in rhyolite. Most obsidian is formed when rhyolitic lava flows cool very rapidly preventing crystallization. The primary mineral content of rhyolite is Silicon Dioxide (SiO_2), although oxides of sodium and potassium can also be present in concentrations of up to 5 percent. Most obsidian is dark in color, the coloring agent being iron oxide. Dark colored obsidian's color is generally caused by magnetite (Fe_3O_4). If the iron is more highly oxidized, it becomes red or brown in color, the color being caused by hematite (Fe_2O_3).

Gas cavities are often formed near the surface of lava flows that form obsidian. Sometimes the gas cavities are numerous as to become the predominant feature of the rock. If the cavities are small, rock has the appearance of froth or foam and is called pumice. If the cavities are larger, the rock is referred to as scoria. If the cavities are subsequently filled with minerals (quartz, calcite, etc.) the rock is referred to as amygdoloid.

One of the most common uses of obsidian results because it fractures easily in a conchoidal (concentric ridges or cone shaped) pattern. That use has been around for a long time – the formation of hand tools and arrow points by flaking. Obsidian is often recommended for those learning how to flake stones due to the ease with which the fractures can be formed.

Snowflake obsidian is dark obsidian with white inclusions. One myth is that the white inclusions are volcanic ash trapped in the obsidian. In fact, the white inclusions are chistobalite, a form of quartz. The white inclusions, being of the same basic chemical composition (SiO_2), it grinds and polishes at the same rate, thus a polished piece of snowflake obsidian is easily formed.

Obsidian is found in many localities, especially near recent (geologically speaking) volcanoes. The Obsidian Cliffs in Yellowstone National Park is a classic example. Other locations include California, Oregon, Arizona, Utah, and Wyoming

Ref: Fay, Gordon S., *The Rockhound's Manual*, copyright 1972, Harper and Row, New York

Loomis, Frederick B., *Field Book of Common Rocks and Minerals*, copyright 1923, 1948, G.P. Putnam's Sons, New York

Obsidian is Hot Stuff, http://volcano.und.edu/vwdocs/vw_hyperexchange/obsidian.html

Snowflake Obsidian, <http://volcano.und.edu/vwdocs/vwlessons/lessons/Slideshow/Igrocks/Igrock7.html>

USGS, <http://volcanoes.usgs.gov/Products/Pglossary/obsidian.html>

Wikipedia, <http://en.wikipedia.org/wiki>

Coin Cleaning with a Rock Tumbler

by Rick Dalrymple

Small amounts of corrosion on coins (from being buried in the ground or from being left in a pool or fountain for too long) can be removed with a rock tumbler and a mild acid. This is done by placing the coins in a rotary tumbler or vibrating tumbler so that the tumbler barrel is 3/4ths full. Add some water to cover the coins. For a large tumbler barrel add 1 cup of vinegar and let it run for about 6 hours. Check and if they are not done let them go longer. You can do this for up to 2-3 days.

For heavier deposits on the coins, you will have to mechanically remove the corrosion. Do this by placing the coins in the tumbler and adding 60/90 grit (1 pound per 10 pounds of coins) and letting them run for 6 hours. Rarely, they may need longer.

Some people add vinegar to the 60/90 grit for an even more effective corrosion removal. This requires removing the acid from the coins after they are finished. Do this by flushing them with distilled water for several minutes.

For small amounts of coins, you can use a small tumbler. Small tumblers are recommended for the prospectors who find occasional coins.

For companies and churches who have large numbers of coins, I recommend a 40-pound tumbler. Coin Cleaning with Rotary tumblers vs. Vibrating tumblers: Rotary tumblers take longer but are more effective and cost less. Vibrating tumblers will NOT remove the heavy scale or corrosion. They will remove light scale and corrosion in 2-3 hours. If you have heavy corrosion and try to use a vibrating tumbler, you will not get the coins clean enough for a bank.

Rocks and Minerals at Rockpick Legend Co. 03 Apr. 2006. <http://www.rocktumblers.blogspot.com/>

© 2005 Rockpick Legend Co.

via The Rollin Rock, July 2006 edition

George Browne, SCFMS Safety Chair Sunburns and Skin Cancer

from the May-June SCMS Newsletter, via Chips and Chatter, July 2006 edition

Summer is a great time for outdoor activities, but with summer we also get heat and sunshine, which can be both wonderful and dangerous. In our geographical area we get an excess of both. However for this article I want to concentrate on sunshine or more specially our exposure or overexposure to this danger.

It may take less time to get sunburn than you realize. Some TV stations report a Sun Intensity Index with the weather. That index is the number of minutes it takes for fair unprotected skin to redden. It is true fair skin will burn quicker than dark skin, but not by much. Usually skin damage will occur within 20 minutes of constant exposure and even a shorter time in higher elevations. Sunburns are miserable and can and do lead to skin cancer. Skin cancer is one of the fastest growing forms of cancer encountered today and some forms are deadly.

How do you avoid this potential killer? By avoiding direct sun exposure to the skin. Wear long sleeve shirts and pants, (not shorts), and a hat. Use sunscreen with at least a SPF of 15. The SPF is the Skin Protection Factor. How do you use these numbers? You start with the Sun Intensity Index or the time it takes you to burn. If you burn in 20 minutes then that times the SPF of the sunscreen to determine the maximum time the sunscreen will give protection. Example: If you burn in 20 minutes, your SPF 15 sunscreen will protect you for 300 minutes or 5 hours provided the sunscreen is not washed or rubbed off. The best advice is reapplying the sunscreen often.

Let me add something about the proper hat to wear. Skin cancer on the top of the ears is much, much more likely to occur on men than it is on women. Why? Because men often wear baseball or "give me" hats that leave the top of the ears exposed to the sun. Women's ears are more likely to be protected by their hair or they wear wide brim hats. So, men loose those billed caps when you are rockhounding and wear wide brimmed hats and use screen on you ears, especially on the left ear. Why? Because men will often drive with the window down looking for rocks and exposing their left ear to direct sunlight.

Enjoy summer, but protect yourself from excessive heat and exposure to the sun. For more detailed information on these subjects, go to the AFMS web site: [HYPERLINK >www.amfed.org<](http://www.amfed.org) and click on the Safety link and look for sun related articles. Unprotected sun exposure over time can cause cancer, which could result in death.

So be aware, take precautions and be safe.

George Browne

Santa Clara Valley Gem and Mineral Society General Meeting Minutes June 27, 2006

President John Eichhorn called the meeting to order at 7:48 PM at the Belwood Cabana Club in Los Gatos. Members and guests were welcomed. Minutes were approved as printed in the Breccia. The board meeting will be hosted by Frank Mullaney, at Ruth Bailey's home on Thursday June 29th at 7:30 PM.

Dues: It is time to pay dues for the next year of membership.

Correspondence: We received a notice from Hazel Woolsey regarding CO-OP field trip information, a statement from Dodge and Cox, and a bill from the Post Office for our post office box.

New Members: Four new members were present. Art Pimentel, Joan Zerbini, Denise Osterback, and Travis Osterback received their name badges and membership packets, and they were welcomed into the club.

Hospitality: There were 47 members and 6 guests in attendance tonight.

Sunshine: See details in the Breccia.

PLAC: See details in the Breccia.

Field Trips: See details in the Breccia.

Study Groups: See details in the Breccia.

Founder's Day Picnic: Raffle Prizes and Bingo Prizes are needed for the Founder's Day Picnic. Get your reservation in immediately for your meal.

Federation Report: Ruth Bailey presented our club with a certificate recognizing our club's participation at the 1200% level in the AMFS Scholarship Foundation. Ruth also reported briefly on the Federation show at Calaveras and indicated that next year's CFMS show will be in Palmdale on June 15-17, 2007. Further information is in the Breccia.

Program: There was no program this evening as we had a silent auction instead.

Member Displays: No member displays due to the silent auction.

Meeting was adjourned at 9:00 PM.

Equipment for Sale: Vince Anderson has some equipment for sale. Call Frank Mullaney for further information.

Rock sale: Frank Mullaney will hold a rock sale, from material that was donated to the club from the George Munwiller estate, on July 16 from 10:30AM to noon at the Cabana Club.

Respectfully submitted,
June Harris for Randy Harris, Secretary

**Santa Clara Valley Gem and Mineral Society
Board Meeting Minutes
June 29, 2006**

President John Eichhorn called the meeting to order at 7:37 PM at the home of Ruth Bailey. All board members were present except Bill Gissler and Larry Moore. Parliamentarian remains vacant. Also present were Montella Lopez and Julaine Mullaney. Minutes for the May 25, 2006 meeting were approved as corrected to show a recommendation of the bylaw changes instead of an acceptance. M/ S/ P to replace “untouchable” with “restricted” in the bylaw changes.

Treasurer’s Report: M/ S/ P to pay the bills.

New Members: M/ S/ P to accept Ed and Eileen Ferner, Jim Ziegler, Jennifer Le, and Frank and Grace Santos for membership (the Santos memberships contingent on their initiation fees being paid).

Communications: None.

Field Trips: See details in the Breccia.

Show Report: Marc Mullaney gave a brief report on the 2007 show.

Founder’s Day: 35 people have signed up for the Barbeque. There was discussion about a sound system so everyone can hear the activities.

Federation Report: We received a note from McDaniel Insurance Services thanking us for participating in the CFMS Directors and Officers Liability Insurance. M/ S/ P to renew the policy when it comes due in October.

Unfinished Business: There was discussion about the lapidary shop at Shoup Park. Those who wish to use the lapidary shop must become members of the Garden House.

Donation Policy: There was discussion about the new Donation Policy and a Donation Committee. M/ S/ P to adopt the Donation Policy for a limited trial period of 6 months.

New Business: There was discussion about the Junior Group and the lack of activities for them.

M/ S/ P to adjourn at 9:15 PM.

Julaine Mullaney served delicious refreshments that were enjoyed by all.

Respectfully submitted,
Randy Harris, Secretary

**No Treasurer's report for this month
Next month will have both the
June and July reports.**