

Breccia

Santa Clara Valley Gem and Mineral Society (SCVGMS)

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 between Leigh Avenue and Harwood.

Society Purpose: The inculcation of a love of rocks and minerals by the furtherance of member's 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.

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

General Meeting: will be Jan 25, 05 at the Cabana Club, 100 Belwood Gateway, Los Gatos, CA 95032 at 7:45 PM.

Board Meeting: will be Jan 27, 05 at Marc Mullaney's Home, 1685 Cross Way, San Jose, 95125 at 7:30 PM (408) 691-1584.

Study Groups

Stringers: Next meeting will be on January 13 from 7-9PM at Mary Lu Ferrara home. See article on page 4 for more info

Facet Cutters: Next meeting will be on February 3, at Bill Norton's home, 276 Belblossom Way, Los Gatos 95032. Call Bill for more information (408) 356-8254.

Mineraleers: Call Chuck Boblenz (408) 734-2473 for information on the January Meeting.

Silversmithing: Beginner class starts on February 16. See article on Page 4.

Juniors: Meetings are announced at Gen-

eral Club Meetings and via email. For More information call Mark Wartenberg (650) 568-6114.

Carvers: Have not announced their next meeting.

Cutaways: Will resume meetings on February 5 From 9 AM –12 PM at Shupp Park Lapidary Shop. The Focus of the group will be cabachons Call John Eichhorn for more info (408) 749-0523.

Fossileers: If interested call Gail Matthews, (650) 962-9960, for information on the next meeting and field trip.

John's Note

A new year is upon us. Welcome to all the new and old board and club members. We have many committee positions to fill, so join in the fun. Previous committee heads are a great help to anyone who wants to try a position. Experience or knowledge of gems, minerals and how a club is run is not necessary. I'm living proof of that...

I also want to welcome all members to participate in the study groups. These are a great way to learn and share information in informal groups.

I would like to hear any and all ideas on a plan to develop a work shop the club members can setup and use. Any ideas? Let us hear them.

It's your club, so join in the fun! And don't forget about our show in April.

Thank you,
John

June Jabberings

This past year has been a busy one for me as your editor. Being new to rockhounding and lapidary work of any kind, made this job challenging as well as educational. Many of you probably have little idea as to what the newsletter editor job really is like. I know that while I had written newsletters before, I had not written one that I had very little knowledge on the subject. Anyway I thought that I would outline what has been going on with this position during the last year.

With the January 2004 newsletter, I took over the position of editor and exchange editor. First newsletter is always the hardest. Between January and June, I worked on getting new clubs added to our mailing list to replace clubs that no longer exchanged newsletters with us. We are currently have about 120 exchange clubs. Also during this time I started binders for saving articles from other newsletters. There are currently 5 binders that are catalogued. These binders have the following titles: Rocks and Minerals, fossils, field trips, geology, and Techniques. These binders are available at most club meetings for members to look at and if you would like a copy of an article, I can get it for you. This is an unbelievable wealth of information.

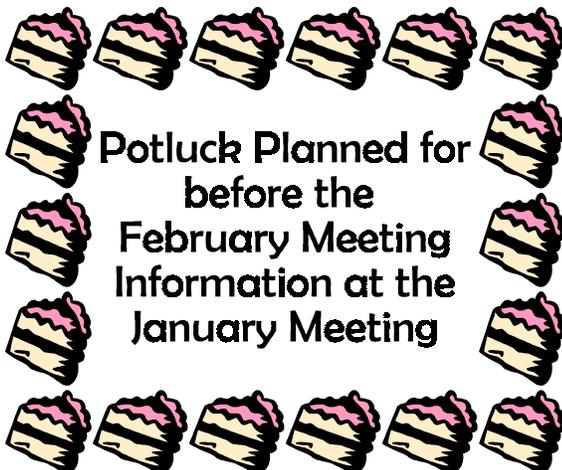
From June until December, I have worked with RK Owen and Marc Mullaney to get our website updated to be able to convert many of our exchange clubs over to receiving our newsletter via email or by downloading it from our website. Recently, due to losing our nearly free printing of the newsletter, we have had to make dramatic changes to our mailing list. As of January of 2005, we will no longer be able to mail out newsletters to our exchange clubs and we will only be able to send electronic copies or notices for downloads. This is a huge step up in technology.

The above items are in addition to writing and editing our newsletter each month. A job that I really like to do (most of the time, some days computers can be such a pain). I want to thank all the people who have helped me with my job. Following our last editor, Pat Speece, is a hard act to follow.

Thanks,
June Harris

Member News

Correction to Dee Stolpe's address: it should read 5715 Ladner Dr. San Jose 95123-3419. Sorry, Dee for the error.



Check out what our study group are doing!!



MINERALEERS *Stringers*



The Mineraleer's will resume meetings in January. Contact Chuck Boblenz (408) 734-2473 for more information about meeting date, time, place and subject.

Silver Smithing



We will begin on February 16th, and then on each consecutive Monday and Wednesday for the next four weeks. The classes will run from 7PM to 10PM each night. Those next in line for the class will be notified by me or Pat Speece. The class will be held at Pat Speece's house in their workroom. We will be checking it for the next two months to determine if it will be warm enough to conduct the classes in their outside workroom, which is enclosed. We are going to try to warm it with heaters...hopefully we will be successful.

The Stringers had a jolly good time at the December get-together. Our next lesson is January 13, 2005 at Mary Lu's from 7-9pm.

We're making PROJECT 2: 2-STRING BRACELET

Materials needed: Double clasp, Thread, 2 needles, French coil, Beads (I can supply a variety of seed bead colors.), Glue
Again, logic rules. If you use big beads (which tend to have bigger holes), you need bigger thread and bigger French coil, and a sturdier needle. The thread must fit through the needle which must fit through the beads and the French coil.

PLEASE NOTE: We've also made a change to Project 3. Instead of the beaded cab, we are making a memory wire bracelet. I'll have samples at the January general meeting, as well as a list and samples of what is needed (bracelet memory wire, a variety of beads that go together, round nose pliers).

Merry Christmas! Pat



CUTAWAYS

The Cutaways will resume meeting with a focus on making Cabochons. John Eichhorn will lead the group and they will meet on the first Saturday of each month at Shupp Park (at the Peninsula club's shop). The first meeting will be February 5 from 9-12. John will bring all the materials necessary to start working on cabochons. Each participant needs to bring Safety Glasses and a waterproof apron. Please contact John Eichhorn (408)749-0523, if you are interested for directions and other information. There is a nominal fee for use of the shop. A one time yearly fee of \$12.50 (the fee has been prorated to \$5.00 and the next yearly dues are due in May) and then a \$1.00 fee for each day of use. Fees are due at time of use. Everyone is welcome. Come check out the group.



Facet Cutters

The Facet Cutters will be meeting on February 3 at Bill Norton's home, 276 Belblossom Way, Los Gatos 95032 at 7:30 PM. Call Bill (408) 356-8254 for information on the study group.

Member Sharing for the January Meeting

The following members are requested to bring an item(s) for member displays for the month of January.

1. David Alexander
2. Walter Andrus
3. Deborah and Gabriel Arambula
4. Jeff Arnett
5. John Bahr and Suzi Papineau
6. Ruth Bailey
7. Chuck and Jeri Boblenz
8. Hershall and Nancy Boring
9. Mary Brown
10. Regina and Arlene Burton

Next month the list for the rest of the year will be published.

MEMBER DISPLAYS FOR THE 2005 SHOW

By Lynn Toschi

First of all, I would like to thank Frank Mullaney, our Show Chairman, for asking me to be the Membership Display Chairman for our upcoming 2005 show. It is quite an honor to be responsible for this endeavor for the Fiftieth Anniversary Show of the club my Grandfather, Hal Pearsall, started in 1954. This is a very important show for us, and I want to encourage each and every member to participate. There really is no mystery about putting a case into the show, we are all members of this club because we are passionate about some facet of collecting, polishing, or displaying rocks, gems, and minerals. Now is the time for you to show your fellow members, and the public in general, what turns you on about this wonderful hobby.

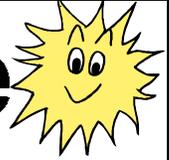
The easiest way to get started is to take some space somewhere in your home, a table or a workbench for instance, and lay out the floor dimensions of 20" by 47", which is the size of the bottom of your showcase. Now the fun begins. Go through your collection, through all your drawers, cupboards, shelves, and workshops and select 15 to 25 of your favorite specimens. These can be rare, eye-popping, jaw dropping gems, or they can be that little, polished beach agate that recalls a special memory from your trip to Oregon. Get those favorite specimens out of hiding and let's show the public and our fellow rock enthusiasts why we love this hobby.

With just a little more than three months left before the show, now is the time to start getting ready to display. On our club website, you will find information on how to make case liners, the rules for competitive or non-competitive cases, and a display entry form. I would also like to hold a seminar in Feb. or early March about final preparations to display, which would concentrate on case liners, labeling, and creating attractive finished displays. If anyone has any comments or input, call me at (408) 353-3323, and please get your display forms in the mail. Remember, this is YOUR show, PARTICIPATE, PARTICIPATE, PARTICIPATE !!!!!!!!!!!!!!!

Show meeting will be on Thursday, January 20, 2005

The show is fast approaching. The Santa Clara Valley Gem & Mineral Society puts on a great show each year. We will have a great show again this year with everyone's help. Don't forget it is our 50th Frank Mullaney.

Sunshine



No good news, no bad news, no news at all. If you have information concerning any member who is ill, hospitalized, or has had a death in the family, please contact our own Suzi "Sunshine" Papineau, (408) 267-1620.

Our January Program is a mystery program. Come and discover the secret!

The 2005 Show How Can You Help?

Door Prizes for Show Montella Lopez

One of the attractions at our show are the hourly door prizes which we give each year. These are made possible by the generosity of our members and it is time to be thinking about what you want to contribute. Our prizes are always good quality and recipients have always been pleased.

I can accept your donations at any meeting or you can bring them to the show. Please let us know if you plan to be giving a door prize.

Decorations for the Show Jane Yamashita

Items needed for Decorations

1. Live plants big and small.
2. Driftwood and interestingly shaped branches like Manzanita.
3. Dolls or Statues that have a theme. Items to fill or decorate the spaces between displays. Any new ideas welcome. Think about packing them in boxes safely and they will come back to you that way.
4. Placemats or bamboo type mats to put the items on.

SCVG&MS Calendar



January 13 Stringer's Meeting 7-9 PM

January 20 Show Meeting at Frank Mullaney's

January 25 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM

January 27 Board Meeting at 7:30 PM at Marc Mullaney's Home, 1685 Cross Way, San Jose 95125 (408) 691-1584.

February 3 Faceter Meeting Place and time to be determined. Call Bill Norton for details. (408) 356-8245

February 5 Cutaways Meeting 9-12 at Shupp Park (The Peninsula Club's Workshop)

February 10 Stringer's Meeting 7-9 PM

February 16 Silversmithing class 7-10PM

February 21 Silversmithing class 7-10PM

February 22 General Mtg at Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM

February 23 Silversmithing class 7-10PM

February 24 Board Meeting at 7:30 PM Place to be determined

February 28 Silversmithing class 7-10PM

March 2 Silversmithing class 7-10PM

March 5 Cutaways Meeting 9-12 at Shupp Park (The Peninsula Club's Workshop)

March 7 Silversmithing class 7-10 PM

March 9 Silversmithing class 7-10PM

March 10 Stringer's Meeting 7-9 PM

March 14 Silversmithing class 7-10PM

March 22 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM

March 24 Board Meeting at 7:30 PM at Chuck Boblenz home, 655 Coleta Court, Sunnyvale 94085, (408) 734-2473

April 2-3 SCVG&MS 50th Annual Show at Santa Clara Valley Fairgrounds, 10-5 both days.

April 14 Stringer's Meeting 7-9 PM

April 26 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM

April 28 Board Meeting at 7:30 PM at RK Owen's home, 5171 Leigh Ave, San Jose 95124 (408) 377-5373

May 24 General Mtg at the Cabana Club, 100 Belwood Gateway, Los Gatos 7:45 PM

May 26 Board Meeting at 7:30 PM at Randy Harris' home, 107 Dell Way, Scotts Valley 95066 (831) 438-5150.

June 28 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM

June 30 Board Meeting at 7:30 PM at Jane Yamashita's home, 24320 Mt Charlie Rd. Los Gatos, 95033 (408) 353-2982.

July 26 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM

July 28 Board Meeting at 7:30 PM Place to be determined

August 23 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM

August 25 Board Meeting at 7:30 PM Place to be determined

September 27 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM Nominating committee appointed

September 29 Board Meeting at 7:30 PM at John Bahr's home, 4991 Corbin Ave. San Jose, 95118 (408) 267-1620.

October 25 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM Nominating committee submits 2006 board member nominees.

October 27 Board Meeting at 7:30 PM at Frank Monez's home, 407 Bluefield Dr, San Jose, 95136(408) 578-7067

November 22 General Mtg at the Cabana Club 100 Belwood Gateway, Los Gatos 7:45 PM 2006 Board elections, Board Meeting immediately following general meeting.

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



January 15-16 2005, Exeter, CA Tule Gem & Mineral Society Exeter Veteran's Memorial 324 N. Kaweah (Hwy 65) Hours: Sat. 10 - 5; Sun. 10 - 4 Mary Reed (559) 784-6394

January 29-30 2005, Redlands, CA Southern California Micro-Mineralogists 39th Annual Pacific Micromount Conference San Bernardino County Museum 2024 Orange Tree Museum Hours: Sat. 9 - 10; Sun. 9 - 1 Beverly Moreau (714) 577-8038 E-mail bcmoreau@adelphia.net

February 18-27 2005, Indio, CA San Gorgonio Mineral & Gem Soc. Date Festival - Gem & Mineral Bldg #1 Riverside County Fair & Date Festival 46-350 Arabia St. Hours: 10:00 am - 10:00 pm Bert Grisham (951) 849-1674

February 19-20 2005, Stockton, CA Stockton Lapidary & Mineral Club 54th Annual Earth's Treasurers San Joaquin County Fairgrounds 1658 South Airport Way - Buildings 4 & 5 Hours: Sat 9-5 Sun 9-4 Laurie Haines (209) 838-0108 E-mail lhaines99@aol.com

March 4, 5 & 6 2005, Hayward, CA The Mineral & Gem Society of Castro Valley Centennial Hall, 22292 Foothill Blvd. Hours: Fri, & Sat. 10 - 6; Sun. 10 - 5 Ron Miller (510) 538-2397 Email: mgsev@yahoo.com

March 5-6 2005, Ventura, CA Ventura Gem & Mineral Society Seaside Park (Ventura Co. Fairgrounds) 10 W. Harbor Blvd. Hours: Sat. 10 - 5; Sun. 10 - 4 Jim Brace-Thompson (805) 659-3577 Email: jbraceth@adelphia.net

March 5-6 2005, Arcadia, CA Monrovia Rockhounds Inc. The Arboretum of Los Angeles County 301 N. Baldwin Avenue Hours: 9 - 5 both days Jo Anna Ritchey (626) 359-1624

March 12-13 2005, Turlock, CA Mother Lode Mineral Society Stanislaus County Fairgrounds 900 N Broadway Hours: 10- 5 Bud McMillin (209) 527-8000 (Wk) or 524-3494 (H) E-mail: Bud.McMillin.b7yj@StateFarm.com

March 12-13 2005, San Marino, CA Pasadena Lapidary Society "Magic From The Earth" San Marino Masonic Center 3130 Huntington Drive Hours: Sat. 10 - 6; Sun. 10 - 5 Marcia Goetz (626) 914-5030 Email: JOENMAR1@GTE.NET

April 9-10 2005, San Diego, CA San Diego Mineral & Gem Society Al Bahr Shrine Center 5440 Kearny Mesa Rd. Hours: Sat. 9:30 - 5; Sun. 10 - 4 Wayne Moorhead (858) 586-1637

April 9-10 2005, Hacienda Heights, CA Puente Hills Gem & Mineral Club Steinmetz County Park Recreation Building 1545 S. Stimson Avenue Hours: 10 - 5 both days Paula Hess (562) 696-2270 E-mail: rphess@adelphia.net

April 23-24 2005, Lancaster, CA Antelope Valley Gem & Mineral Club Antelope Valley Fairgrounds 2551 West Avenue H Hours: 9 - 5 both days Armin Nimmer (661) 945-5769

April 23-24 2005, Santa Cruz, CA Santa Cruz Mineral & Gem Society Santa Cruz Civic Auditorium Hours: 10 - 5 both days Contact: Hubert Drake (831) 688-8086 E-mail: hmdrake@pacbell.net

May 7-8 2005, Reno, NV Reno Gem & Mineral Society Reno Livestock Events Center Exhibit Hall 1350 N. Wells Avenue Hours: Sat. 10 - 5; Sun. 10 - 4 Jennifer Rhodes (775) 356-8820

May 14-15 2005, Newbury, CA Conejo Gem & Mineral Club California Gems & Minerals Borchard Park Community Center 190 Reino Rd. Hours: Sat. 9-5; Sun. 10-5 Bob Stultz (805) 498-4220

June 4-5 2005, La Habra, CA North Orange County Gem & Mineral Society Jubilee of Gems Show 101 W. La Habra Blvd. Hours: 10-5 both days Don Warthen (626) 330-8974 Email: warthen@earthlink.net

June 10-12 2005, Roseville, CA CFMS & Roseville Gem & Mineral Blast Roseville (Placer County) Fairgrounds 800 All American (916) 630-1000 Web Site: www.rockrollers.com Show Web Site: www.rockrollers.com/show.html

August 5, 6, 7 2005, Nipomo, CA Orcutt Mineral Society St. Joseph's Church 298 S. Thompson Avenue Hours: 9 - 5 Daily Lucky Virgin (805) 929-4525 Email: lvirgin@impulse.net

Upcoming Regional Federation Shows

California Federation

June 10-12 2005

Roseville, California

Eastern Federation

March 18-20, 2005

Sayre Pennsylvania

Midwest Federation/ AFMS

August 16-21, 2005

St. Louis, Missouri

Northwest Federation

August 5-7, 205

Albany Oregon

Rocky Mountain Federation

June 17-19, 2005

Colorado Springs, Colorado

South Central Federation

December 2-4, 2005

Austin, Texas

PLAC Report

Keeping Public Lands Public By Bob Cranston
From AFMS 12/04-1/05 Newsletter

This was sent to me be an officer in the BLM. I think his advise is good and if anyone wants to protect their rock collecting privileges, this would be one good way to start. The other and best way is to get off our duff's and do something. First download and print out and digest the 7.3 megabytes of material listed below. If you can't digest it and make a decision, get some help. There are at least a couple of lawyers in our group and although they are up to their ears in work, they will talk to you.

If you print this out, you will have the emails, of at least a couple of them. They are our peers, so don't hesitate to talk to them.

Keeping Public Lands Public

Dear fellow rock hunter recreationists:

Today I stumbled upon a valuable document that can help all of us fight for the use of public lands to continue our hobby.

We can take a page out of the other side's book to assist our efforts to participate in the resource management decisions of the BLM and the US Forest Service that may unjustly restrict our rights and abilities to collect rocks, fossils, and minerals.

Actually, this is 7.3 megabytes of pages from the Wilderness Society "Book" titled "A Conservationist's Guide to BLM Planning and Decision Making Using FLPMA and NEPA to protect Public Lands." <www.Wilderness.Org/Library/Documents/upload/BLM-Citizen-s-Guide-full-report.pdf>

Just as the wilderness advocates can use knowledge about federal agency decision-making and processes to lock us out of public lands, rockhounds can take the same knowledge to present opposing information and perspectives. Each of us can become informed about what's being planned in areas of collecting that are our favorites. Personal visits to ranger stations, field trips with the geologists or recreation planners are valuable to make ourselves know and our interests heard. Participating in the planning

processes also gives us "standing" to protest or appeal decisions that are made against our hobby in spite of our previous input.

Rockhounds don't have the multi-million dollar budgets of the eco-scare organizations, but we can use our existing club and federation contacts to lobby agency managers and legislators. If we could team like minded groups that would amplify our voices.

A personal pitch of mine is for us to keep other political agenda separate from our interest in either promoting responsible collecting opportunities or opposing unreasonable restrictions. Some of the other groups that support access to public lands have tended to attach unrelated philosophies and themes, such as right to bear arms, and property rights, for example, to their messages. These themes may be important in themselves but they distract from our main interest and shift discussion from facts to opinions and emotional responses.

Last Item: A plug for the Barstow BLM office website pages on rockhounding in the Barstow, CA area. <www.ca.blm.gov/barstow/rock.html>

This is an excellent summary of collecting rules and some descriptions of local collecting sites. I haven't confirmed it, but I suspect Harold Johnson, Recreation Chief of the Barstow BLM office is to thank for the good work.

Dinosaurs in Antarctica

Via, GI Nugget5/04, Via Pegamatite 4/04 from NSF Release 04-025 at www.nsf.gov/od/lpa/newsroom/pr.cfm?ni=52

Two teams of fossil hunters working independently in Antarctica have discovered bones of two previously unknown types of dinosaurs. An 8 foot tall therepod or running dinosaur, a carnivore related to T. Rex was discovered by Judd Case of St. Mary's college and James Martin of South Dakota's School of Mines on James Ross Island. Millions of years ago, the climate of this island was much like present - day northern California. Thousands of miles inland, 13,000 feet up Mt. Kirkpatrick near the Beardmore Glacier. William Hammer and his crew located the remains of a primitive sauropod, or herbivore, estimated to be about 6 feet tall and 30 feet long when alive. Millions of years ago, before tectonic uplift, this site had been a soft riverbed.

U.S. Postal Service Irradiation Process May Affect Some Gemstones

The jewelry industry relies heavily on the USPS to ship gems and jewelry throughout the United States. As most are aware, the recent incidences of people being infected by anthrax spores sent through the mail has caused the postal service to seek ways to protect both their employees and the public from the potential threat. One part of this effort is to use a technique that actually kills anthrax spores (and other biological agents) in the mail as it is being processed.

One company with which the postal service has contracted, SureBeam (a Subsidiary of Titan Corp.), make equipment designed to destroy food borne pathogens such as salmonella. Sure Beam uses a type of linear accelerator that creates a beam of high energy electrons. This is the same type of ionizing radiation that is often used intentionally to change the color of some gems materials— and could produce an undesirable result as well. We at GIA and others in the trade immediately recognized the potential impact of this development on the jewelry industry and the consuming public, so we decided to test the effect of the proposed postal irradiation process on several gem materials.

The Process: For these initial tests, we chose gem materials that based on our many years of experience and discussions with experts in the field, we know may be significantly affected by irradiation. This group consisted of two types of cultured pearls plus eight different gem species and a number of varieties of those species - all of which were natural— for a base of 16 different samples (table 1). We also included a 14 karat yellow gold ring, to reassure the industry that gold jewelry would not retain any residual radioactivity from this process.

We made up three sets of this sample group and placed them in boxes that were packaged in the same manner that we routinely use to ship gems from the GIA Gem Trade Laboratory. Because stones are often shipped through the mail More than once (e.g., sent out on memo, returned, or sent to a manufacturer for mounting and then returned or sent to someone else), we asked to have one package scanned just once, another scanned twice, and the third scanned four times—to see if the cumulative effect of multiple scans caused any significant difference.

The contents of the boxes were identical, except there was only one heavily included gray diamond. We placed this in the package that was to receive four scans to confirm that it would not retain any residual radioactivity, as is often detected in irradiated black diamonds.

A spokesman for SureBeam told us that the actual dosage being used by the postal system was 56 Kilo-grays (kGy), which is equivalent to 5.6 Megarads. This figure was later confirmed by Laura Smith, Quality Assurance Manager for Titan Scan Technologies, another Titan Corp. Subsidiary, who agreed to run tests for us under the same conditions that are being used by the post office. It appears, however, that this figure is approximate, as our three packages were exposed to the following radiation doses:

Package A—one scan— 51.0 kGy

Package B— two scans—113.5 kGy Total

Package C—four Scans—251.7 kGy Total

Results: After we retrieved the packages, we first checked for the presence of residual radiation with a vis-toreen model 290 radiation survey meter. No residual radiation was detected on the unopened packages or any of the individual samples.

Next, we examined each stone for obvious changes in appearance. (Changes in absorption spectra and analytical data will be addressed in future research.) All of the gem materials other than diamond showed a dramatic change in color (see table 1)

TABLE 1 Gem materials exposed to irradiation conditions used by USPS.

Gem Material	Before	After
Diamond	Near Colorless	Near colorless; no change
Diamond	Gray (due to inclusions)	Gray: no change
Kunzite	Pink	Green
Morganite	Brownish orangy pink	yellow
Cultured pearls; bead-nucleated freshwater	White	Gray
Cultured Pearl; tissue-nucleated freshwater	White	Gray
Quartz	Colorless	Brown
Quartz	Yellow (Citrine)	Brown
Sapphire	Light Blue	Yellowish orange
Topaz	Colorless	Brown
Tourmaline	Near colorless	Light pink
Tourmaline	Light Pink	Darker pink
Tourmaline	Bi-colored Green and pink	Green; no change pink; darker
Zircon	colorless	Pinkish brown
Zircon	Yellow	Yellowish brown
Zircon	Green	Greenish yellowish brown

For most of the samples, the changes were just as dramatic in the box that went through one scan as in the box that went through four. However, the degree of change was different for some stones. For example, the colorless quartz in the box that was scanned once came out a medium brown; a similar sample in the box scanned twice turned dark brown; and the third sample, scanned four times, became almost black.

Some of the color changes produced by radiation exposure are known to be unstable to light or heat. (For more on the color stability of irradiated gems, see K. Nassau, Gemstone Enhancement, 2nd ed., Butterworth-Heinemann, Oxford, 1994.) Therefore, we performed some

Continued on page 10

U.S. Postal Service Irradiation Process May Affect Some Gemstones (cont from pg 9)

simple experiments on selected samples to try to return them to their original, pre-irradiation color. The stones included sapphire, kunzite, and (originally colorless) zircon. In each case, we tested one of the three irradiated samples and saved the others for comparison.

In an attempt to fade these stones, under realistic conditions, we taped them to a south facing window on a sunny day in December. And checked their color periodically. After approximately 2.5 hours, the green color that had been induced in the kunzite and the pinkish brown in the zircon had completely disappeared, and the stones had returned to essentially their original colors. It is interesting to note that the other two zircons showed noticeable color fading even though they had been kept in the stone paper and were removed only briefly for photography.

The sapphire slowly lost color and became more yellow than orange. After 36 hours, the stone had faded to light yellow and was removed from the window to be photographed. In an attempt to return the stone to its original light blue color, we gently heated it in the flame of an alcohol lamp. This method was successful in removing the remaining yellow color. However, the original blue hue did not return, and the stone was left colorless. According to Dr. John Emmett (pers. Comm., 2002) if the stone were heated to significantly higher temperatures in a reducing atmosphere, the blue color should be restored.

Implications for the Future. Currently, the U.S. Post office is scanning only a small portion of the mail and only letters and flat envelopes. John Dunlap, Manager of Materials Handling and Deployment of the USPS Engineering Group, Which oversees mail sanitization operations, told us that "Probably nothing will be done to packages that are sent registered or certified [preferred method for the jewelry industry], since we now require information from the sender." Other postal authorities have commented that the cost and time required to scan all mail would be prohibited.

We also contacted the U.S. Customs Service, Brinks, MalcaAmit, UPS, and Fed Ex, and learned that no irradiation procedures were being used or were planned by them at this time. Nevertheless, it is important that members of the trade and the consuming public alike be aware that some gem materials could be affected by the procedure, and every effort should be made to ship such materials by methods that are not likely to be exposed to the irradiation process.

We recognize that other gem species or varieties, including ruby and emerald, may be affected to lesser degrees by this radiation dosage. Also, not all members of the same species or even the same variety should be expected to react similarly. For example, according to Dr. George Rossman of the California Institute of Technology (pers. comm. 2001), it is less likely that blue sapphires from basaltic deposits (E.G., Thailand or Australia) will show a change in color. In the second phase of our testing, which is already underway, we will investigate these and many more questions about this newest concern to the industry. Shane F. McClure, Thomas M. Moses, and John I Koivula GIA Gem Trade Laboratory, Carlsbad and New York smcclure@gia.edu. Copyright Gemological Institute of America reprinted with permission. Via the Rockcollector 11/04

NASA to send celestial hammer to break open comet

Posted on : 2004-12-20| Author : I. A. Harry| News Category : Space

Scientific curiosity is going to cause a minor collision in space. On January 12, 2005, NASA is scheduled to launch a spacecraft named Deep Impact. This spacecraft will fire an 800-pound impactor right into the path of the 4-mile wide comet Tempel 1. The collision is scheduled to take place on July 4, 2005. The mission is stated to cost approximately \$ 330 million. Scientists at NASA are very eager to know what happens after the impact. According to a senior official associated with the project, the impact, they hope, will put an end to all the speculation about the interiors of comets. How comets are formed and what is their mineral composition.

The scientific community have long been interested in knowing what lies beneath the surface of any comet. They say it will help prove or disprove theories about how our planet was formed. Some scientists believe that comets are leftovers that remain after the solar system was formed. There are some who say that comets are made up of agglomerating dirty chunks of water ice.

At the time of the collision, the comet Tempel 1 will be close enough for astronomers to monitor what happens. The debris that will be kicked up will reveal, for the very first time, just what a comet is made of. A member of the mission management team at Jet Propulsion Laboratory says that this collision is the astronomical equivalent of "tapping something with a hammer to find out what lies beneath its surface", a practice common among geologists. He said "The difference is - we're going to tap it with an 800-pound hammer." He said that this collision will provide a better understanding of comets than the previous opportunity they had when NASA's craft Stardust photographed the Comet Wild 2 at very close range. Those photographs only whetted the scientific curiosity of wanting to know what lies underneath a comet's surface.

The mission management team is not sure what they hope or expect to find. Within the team there is already much speculation and even friendly betting. Most are in favor of finding chunks of water ice. One team member said that if that is the case, then they expect a large crater caused by the impact, roughly the size of a football stadium. Another team member speculated that the comet is more porous and fragile than is believed. The collision between the projectile and the comet, at a speed of 22,000 mph, will take place 83 million miles away from Earth.

Feeling Minerals by Dr. Bill Cordua
University of Wisconsin at River Falls
From Leaverite News 2002, newsletter of St. Croix Rockhounds
Posted on Dr. Bill Cordua Home Page [Http://www.uwrf.edu/~wc01/welcome.html](http://www.uwrf.edu/~wc01/welcome.html)

Most of us are light oriented when we study rocks and minerals. Once, though, I was asked to give a program on minerals for the Minnesota Society for the Blind. As I was preparing this, I was impressed by the number of properties minerals have that can be sensed with the hands. It's worthwhile reviewing some of these as they are good identification tools for anyone.

Density (or specific gravity) is one of the more familiar ones. This is the mass per volume. As an example, think of suitcases. They have a certain volume. When they are empty, they have little mass, thus a low density. Put clothes in them and they get heavier for their volume. If you're a typical rock collector, you have probably put rocks in your suitcases and increased their density immensely, much to the annoyance of airport luggage handlers. Mineral densities can be evaluated the same way—but hefting them. If they have a medium density, they will feel about normal in mass for their size. If they are low density, like pumice or muscovite, they will feel light. If they are higher density, like garnet, galena, copper, barite or magnetite, they will feel heavy for their size. There are, of course, many ways to measure this density precisely, but "the heft test" still is a useful field test requiring no expensive instruments. You can fine-tune your approach by practicing hefting known minerals.

Another property that can be appreciated with the hand is tenacity - the resistance of a mineral to mechanical crushing or bending. Brittle materials will break when stressed. Most minerals are brittle. Malleable minerals, such as copper or gold can be flattened into sheets. Those who collect on the old copper mines in Michigan's Keweenaw Peninsula are aware of the resistance of copper-bearing rocks, and the spiny feel of the broken copper edges. These minerals are also ductile, meaning that they can be drawn out in the form of a wire. Some minerals like chalcocite or gypsum are sectile, meaning they can be cut with a knife. Gypsum is soft enough to be cut by a fingernail. Some minerals, like the micas, are elastic and can return to their original shape after being bent. Some mineral like talc are flexible. Once bent, these minerals stay bent after the pressure is released.

The smoothness or slipperiness of a mineral's surface can also be used as a tool. Talc feels slippery. Serpentine feels greasy. The fibrous character of splintery or asbestiform minerals can also be sensed.

Other minerals have distinct surface properties related to their wettability. This has to do with the way particular atoms on the surface of a mineral interact with water or other materials. Chrysocolla becomes sticky when moist, as do many clay minerals. Some clay minerals, such as those in the smectite group, actually swell when they absorb water and lose their strength. This is one reason why so many Western roads (where smectites are common in the soils) are good when dry,

but become slippery mud holes after a rain. Diamonds do not wet with water. If a pile of crushed minerals is saturated with water to become a slurry, then run over a grease (such as Vaseline) the uncoated diamonds will stick to the grease while the well-wetted gangue minerals will slide right by.

Beryl, corundum, rutile, spinel, topaz and zircon are other minerals that wet with difficulty. The capacity of dirt to slide off of mineral surfaces also affects their cleaning. People who remark to me that datolites can be recognized on the mines dumps of the Keweenaw by the way the dirt seems to slide off of them are using this property.

Minerals are great to look at, but the enjoyment of their properties span all the senses.

-Dr. Bill Cordua, U. Wisconsin- River Falls

References:

Frye, Keith, 1993, Mineral Science, An Introductory Survey, MacMillan Pub., 360 p.

Hurlbut, C. S. and W. E. Sharp, 1998, Dana's Minerals and How to Study Them, 4th Ed., John Wiley and Sons Pub., 328 p.

Cutting Hints and Tips

Please note that all of the tips and hints have been untried by this editor, so I can not attest to the hints accuracy.

Rock too big? Saturate a 1/2 rope with gasoline and tie it around the stone where you want the split to occur. Ignite the rope and wait until the brief hot flame dies away. Strike the stone several times with a sledge hammer, following the charred mark of the burned rope. The stone will fall cleanly apart where the rope has been bound. Via Mendo Coast Gems 1/04, Gem-N-I Newsletter 10-03

Hint: To remove cutting oil from slabs, first place them in kitty litter to absorb the oil, then put them in warm water with dishwashing detergent. Via RockRollers 1/04, via Rockhound Rumbings 1/01

Reclaiming Cutting Oil: To reclaim cutting oil, 1/2 gallon milk cartons. Pour in the old oil, and add a small amount of water. Let the sludge settle for a few days. Then put cartons in the freezer. The water will freeze and the oil will rise to the top, and can be poured off. Via Rock Chips 1/04

Cutting Soft Stone: When working with a soft stone such as onyx or marble, soak it in water for a couple of days before cutting. This will keep oil from soaking in to discolor the stone and will result in a higher polish. Via Rock Chips, 11/88; via Stoney Statements 1/03, via the Piney-wood Rooter 12/03.

Cutting slabs: Cut thin chunks of rough on the bias (diagonally) to yield larger slabs. Via the GI Nugget 2/04

**SANTA CLARA VALLEY GEM & MINERAL SOCIETY
MINUTES OF THE BOARD MEETING
December 9, 2003**

President Marc Mullaney called the meeting to order at Ruth Bailey's home at 7:32 pm. Absent was Bill Gissler and Bill Norton.

Minutes: A motion was made to accept the October board meeting this was seconded and passed. A motion was made to accept the November board meeting this was seconded and passed.

Treasurer's Report: A motion was made to pay the bills this was seconded and passed.

Correspondence: There was no correspondence.

Installation Dinner: Went well.

A motion was made to adjourn the meeting at 7:52 pm. It was moved seconded and passed.

Respectfully Submitted

Frank Mullaney

SCVGMS Board Meeting, December 9, 2004

Incoming President John Eichhorn reconvened the meeting at 8:00 P.M.

Absent were Vice-President Pat Speece and Director Lynn Toschi. All other Board members were present.

New Business: CFMS and AFMS newsletters will be sent to R K Owen, June Harris and John Eichhorn.

M/ S/ P to pay CFMS dues and insurance for 2005 at \$6.50 per member.

Financial Committee Report: President Eichhorn asked for volunteers for the new committee. The new committee will be John Bahr, John Eichhorn, Ruth Bailey, Marc Mullaney and Chuck Boblenz. They will meet in January to discuss suggested by-law changes to clarify restricted accounts for club funds not needed for operating expenses.

Website: The website was discussed. There are changes that need to be made to update and correct erroneous information. M/ S/ P to pay the bill for the website.

Breccia: Printing and delivery of the Breccia was discussed. Cost reductions need to be made.

M/ S/ P to have June send out notice to have exchange clubs download the Breccia from the website or receive it by e-mail.

M/ S/ P to send the Breccia by first class mail and not renew the bulk-mailing fee.

M/ S/ P to authorize payment of the printing bill for the Breccia before the regular board meetings.

M/ S/ P to e-mail the Breccia to members that have e-mail and to mail it to those without e-mail. Those people with e-mail can request to have a copy mailed to them.

M/ S/ P to adjourn the meeting at 9:33 P. M.

Refreshments were served by Ruth Bailey and John Eichhorn and enjoyed by all.

Respectfully submitted,

Randy Harris, Secretary

Santa Clara Valley Gem and Mineral Society 2005

ELECTED OFFICERS

President: John Eichhorn
(408) 749-0523
email: johneichhorn@earthlink.net
Vice President: Pat Speece
(408) 266-4327
email: pspeece@sbcglobal.net
Secretary: Randy Harris
(831) 438-5150
email: randysparky234@netscape.net
Treasurer: Chuck Boblenz
(408) 734-2473
email: cboblenz@aol.com
Editor: June Harris
(831) 438-5150
email: Juneconeyharris@yahoo.com
Federation Director: RK Owen
(408) 377-5373
email: rk@owen.sj.ca.us
Alternate Fed. Director: Frank Monez
(408) 578-7067
email: Frankm2@sbcglobal.net
Directors:
John Bahr- (408) 267-1620
Don Cox (408) 294-0872
Marc Mullaney (408) 691-1584
Lynn Toschi (408) 353-3323
Jane Yamashita (408) 353-2982
Historian: Anna Windsor
(408) 926-8624
Parliamentarian: Ruth Bailey
(408) 248 6195
email: rba51825@aol.com

COMMITTEE HEADS

Field Trip Coordinator: Jennifer House
Founder's Day Picnic Food: Randy and June Harris
Founder's Day Picnic Raffle and Bingo: Open
Hospitality: Kris and Knut Owen
Installation Dinner: Kathy McChristian
Juniors: Gary and Kathy McChristian,
Mark and Debbie Wartenberg
Librarians: June Warne and Nancy Boring
Member Display: Kelly Van Vleck
PLAC (Public Lands Advisory Committee)
Frank Monez
Program: Marc Mullaney
Refreshments: Montella Lopez
Sargeant-at-arms: Hershhal Boring
Show 2005: Frank Mullaney
Show 2006: Open
Silent Auction: John and Sylvia Palmieri, &
Adam Yamashita
Sunshine: Suzi Papineau
Trailer Custodian: Herb Vogel
Trophies: Frank Mullaney

Breccia Crew: Editor June Harris (juneconeyharris@yahoo.com)
Editor Address and Phone#: 107 Dell Way, Scotts Valley CA 95066, (831) 438-5150
Proofreader: Randy Harris (Randysparky234@netscape.net)
Assembly and Mailing Staff: Ruth Bailey and Bill Norton
Exchange Editor: June Harris, 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.

Santa Clara Valley Gem and Mineral Society

Please send Exchange Bulletins to:

June Harris

107 Dell Way

Scotts Valley, CA 95066



Please Deliver Promptly

Safety First: Frostbite and Hypothermia by Bill Klose, AFMS Safety Chair

Via AFMS Dec 04/Jan 05 Newsletter

Frostbite is the cutting off of circulation to and possibly the destruction of superficial tissues, especially to hands, feet, ears, and nose as well as other areas of the body exposed to cold temperatures. The wind (wind chill factor) and moisture can add to the effects of cold temperature, even above freezing.

Symptoms of frostbite begin as a prickly feeling on exposed areas of the skin followed by numbness and waxy looking patches. In more severe cases, these waxy patches get lumpy, redden, blister, followed by the skin dying and falling off or gangrene setting in. Severe pain is associated with advanced frostbite.

At the first signs of frostbite, dry affected area and cover with cloth or in the case of hands, place into the armpits to prevent further cooling. Do not rub or apply snow to the frostbitten area. The affected area can be placed in water a little above body temperature. But not above 104 degrees F. Do not place affected area under hot running water, as there will not be any feeling initially, so it may become burned. As the frostbitten area "thaws" it is normal to feel pain or a burning sensation. If blisters form, do not break and protect them with loose dressing and seek medical attention immediately.

Hypothermia is the loss of body temperature and can be life threatening. The symptoms are initially uncontrollable shivering with pale and numb skin. The person then becomes confused and forgetful, acts tired, and wants to sit or lie down. In severe cases the person will become unconscious, have shallow breathing, erratic heartbeat, and then the pulse weakens and slows.

At the first signs of hypothermia, take the victim to a warm, dry place and give them hot liquids (not alcohol). Prevent further heat loss with warm blankets, warm rocks, or a companion in bed with the victim. Get medical attention as soon as possible if the symptoms have gone beyond the shivering stage.

The best protection against frostbite and hypothermia is to keep warm, keep moving, and keep dry. Dress in loose layers of warm waterproof and windproof clothing that covers exposed areas. Warm gloves and a hat are essential. Up to 80% of the body's warmth can be lost through an uncovered head. The young and elderly are especially at risk, as are people who have been drinking alcohol, have diabetes, or poor circulation. People taking beta blockers to lower blood pressure are also at high risk. It is best to have someone with you in cold weather who can watch for signs of frostbite and hypothermia.

Enjoy a safe 2004-2005 winter season.