

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 58
Number 6

San Jose, CA
June, 2011

SCVGMS ELECTED OFFICERS

President: Randy Harris
(831) 438-5150
Vice President: Carol Pimentel
(408) 489-4761
Secretary: Rick Kennedy
(408) 529-9690
Treasurer: Frank Mullaney
(408) 266-1791
Editor: June Harris
(831) 438-5150
Federation Director: Ruth Bailey
(408) 248-6195
Alternate Fed. Director: Chuck Boblenz
(408) 734-2473
Directors:
Maxie Casey (408) 227-0526
David Lowe (408) 720-9339
Marc Mullaney (408) 691-1584
Michael Paone (408) 340-3258
Art Pimentel (408) 593-7903
Historian: Michael Paone (408) 340-3258
Parliamentarian: Dean Welder
(408) 353-2675

SCVGMS COMMITTEE HEADS

Donation Receiving Committee Chair:
George Yamashita
Field Trip Committee Coordinator:
Dean Welder
Founder's Day Picnic Food:
Art Pimentel
Founder's Day Raffle: Pat Speece
Founder's Day Bingo: Amy DeMasi
Hospitality: Winnie Moore
Installation Dinner: Michael Paone and
Nancy Reineking
Librarian: Jennifer House
Member Displays: Rick Kennedy
PLAC (Public Lands Advisory Committee): Bill Spence
Program: Frank Mullaney & June Harris
Refreshments: Ed Orekar
Secret Auction: Donation Receiving
Comm.
Sergeant-at-arms: OPEN
Show 2011: Frank Mullaney,
Marc Mullaney and Randy Harris
Show 2012: OPEN
Silent Auction: Julaine Mullaney
Social: June Harris
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 June 28, 2011, at the Cabana Club, 100 Belwood Gateway, Los Gatos, CA 95032 at 7:45 PM.

Our next board meeting will be on June 30, 2011, hosted by Chuck Boblenz and David Lowe at Ruth Bailey's home, 2857 Addison Place, Santa Clara, CA 95051 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 \$20.00 per year.

Our Newsletter, the Breccia, is published ten times annually. The deadline for most articles is the Sunday before the regular meeting. The Breccia Editor is June Harris who may be contacted by email at juneconeyharris@yahoo.com or by phone at (831) 438-5150. The Breccia is proofread by Randy Harris. Ruth Bailey handles 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

Cutaways & Carvers	John Eichhorn	(408) 749-0523
Facet Cutters	Max Casey	(408) 227-0526
Fossileers	Gail Matthews	(650) 962-9960
Jewelers	Marc Mullaney	(408) 691-1584
Mineraleers	Chuck Boblenz	(408) 734-2473
Smithies	Pat Speece	(408) 266-4327

Randy's Ramblings

Hello Fellow Rockhounds,

I would like to welcome all of the new members who have joined the club recently. I invite you to take advantage of the many study groups and upcoming trips that are planned for the near future. If you are planning to go on any field trips sponsored by other clubs, please contact Dean Welder for information by E-mail at field-trips@scvgms.org.

The Founder's Day Picnic will be held on June 25th. I am sure Art and Carol would appreciate help with some of the details. Please volunteer yourselves to help them. The more help they have, the easier it will be. This is a fun event where you can visit with other Rockhounds, eat good food, and win some nice prizes in the raffle and playing Bingo. New members and guests are also welcome. The club provides the meat, drinks and table service. Each family is requested to bring a side dish, salad, or dessert to share. Contact Art and Carol Pimentel soon to RSVP for this event. The sign up form was in the May Breccia.

The show was a great success! The report has been presented to the Board of Directors and we raised more money than last year. I thank all of you donated your time and energy to help make our show one of the best ever! If you have any ideas that would improve the show next year, please contact Frank Mullaney, Marc Mullaney or I. We are always looking for ways to improve attendance and member participation.

Have a GREAT summer!

COME ONE, COME ALL! SILENT AUCTION

at the June meeting. Bring ANYTHING that you would like to donate. Rocks and rock-related stuff is great, but anything else is welcome, too.

Don't forget your wallet or checkbook.

YOU'LL LOVE WHAT YOU FIND THERE.

Questions?

Call Julaine Mullaney (408) 266-1791.

What's in this issue?

President's Message	Page 3
Silent Auction reminder	Page 3
Member displays	Page 4
Rockhound of the month	
Nominations	Page 4
New member welcome	Page 4
Sunshine	Page 4
Founder's day reminder	Page 4
Rockhound of the Month	Page 4
SCVGMS Directories	Page 4
Silent Auction Announcement	Page 4
Study Group Reports	Page 5
Did you know...?	Page 5
Test for Topaz	Page 5
2011 SCVGMS Calendar	Page 6
Field Trip Schedule	Page 6
CFMS Club Show Schedule	Page 7
Federation report	Page 8
Live Auction	Page 8
Safety- RV safety	Page 9
Emeralds-	Page 9
Gypsum and Anhydrite	Page 10-11
Ten Commandments of Using Acid	Page 11
Safer Collecting and Some Things to Make you think	Page 12
Collection Types	Page 13
Chrysanthemum Stone	Page 14
General Meeting Minutes	Page 14-15
Board Meeting minutes	Page 15
Treasurer's Report	Page 16

Member displays

by June Harris

David Lowe brought minerals from his trip to South Africa. He took minerals from here and traded with collectors while he was in South Africa. He has a fabulous tale to tell about his trip.

Art Pimentel brought some of the quartz specimens that he collected on the trip to Hallelujah Junction/Peterson Peak. Art and many of our other members who attended had a great time.

Pictures from past Founder's Day Picnic were out for members to take.

For the month of June, we will not have Member displays. We are having a silent auction instead. Don't forget your checkbook or what you are planning to donate.

Have you nominated a member for Rockhound of the Month?

Please give your recommendation to Randy Harris. You can contact him at a meeting or by email at randysparky234@netscape.net. Please include a short note about what this member has done in support of the society.

I wonder who will be the next Rockhound of the month. Could it be you?

A Big Welcome to our New Members

Matt Wood is interested in collecting, cutting and polishing, and minerals.

Joan Schramm is interested in collecting and minerals.

Rich Macias is interested in collecting, cutting and polishing, fossils, geology, and minerals.

Mike Summers is interested in faceting, field trips, and minerals.

Jacqueline Calderon is interested in geology, collecting, fossils, stringing beads, minerals,

Sunshine

Frank Monez had knee replacement surgery earlier this month. He is doing well.

Herb Vogel had knee replacement surgery last week. He is doing well.

If you know of a society member who has been or is ill, had a death in the family, or has had a great event happen in their life, please contact Ernestine Smith with the news. Ernestine's phone number is (408) 395-5035, or email her at ebotts@juno.com.

**Founder's Day picnic on June 25th.
Call Art or Carol Pimentel if you did not get your reservation in and would like to go.**

Carol (408) 489-4761 Art (408) 593-7903

May's Rockhound of the Month

Maxie Casey

For being instrumental in changing our annual show's security, and for joining the board of directors, and running the faceting study group. Great Job, Max!

**2011 SCVGMS
Directories
are available.**

**Get yours at the next meeting
from the Secretary.**

**June meeting program
Is a Silent Auction
Bring something to donate to the
silent auction, and don't forget
your cash or checkbook!**

Check out what our study groups are doing!!!

Mineraleers by Chuck Boblenz



The Mineraleer's met at the home of Chuck and Jeri Boblenz on May 10th with four attendees. The topic was AGATE and many specimens were passed around to see and to back light them to see what was different and new. Many were plume agates from various locations and showed amazing differences.

The Mineraleer's will go on hiatus from June through August and will start again in September 13th with a meeting at the Boblenz's. The topic will be HARDNESS AND STREAK.

Please watch the BRECCIA for further details. Hope everyone has a great summer and that may your rock bags be full of those super finds.

Cutaways and Carvers



The Cutaways and Carvers group meets on the second Saturday of the month at John Eichhorn's house from 1 pm to 4 pm. Please call John for more information and directions

(408) 749-0523.

Did you know...

Borax: The mineral of a thousand uses

Borax is one of the most commonly used minerals in the home today. It is an excellent "booster" for laundry soap. When added to a load of laundry, borax helps the laundry soap work better than it would by itself. It is used as a deodorizer (it absorbs odors), to soften water, and even to repel pesty insects like cockroaches! Mix a spoon full of borax with a little powdered sugar and leave it out on a plate. Cockroaches and ants will eat the sweet mixture. The borax causes the insects to have gas and then they die. It is claimed that a clogged drain can be cleared by pouring borax mixed with boiling water down the drain.

Information from Diamond Dan Mini Miner Monthly, 2/2011, via Rock Chips, 3/2011.

Smithies by Pat Speece



What do the Smithies do? We make jewelry using a torch, saw, files, polishers, et al. We teach you how and when to use the tools. You are welcome to use our tools, materials, and help. Beginners are always welcome.

We normally meet the second Monday and Tuesday of each month, 7 to 10pm.

If you would like to be on the Smithie email list, let me know at pat.speece@sbcglobal.net. If you would like to be on the Smithie telephone list, let me know at 408-266-4327.

Faceters



The Faceters meet on the first Saturday of the month from 9 AM—noon at Max Casey's home. Please call Max at (408) 227-0526 for directions and more information about this group.

Test for Topaz

Via Gem Cutters News, 3/2011; via Rollin Rock, 11/2010; via Rock Chipper

Drop of Water Test for Topaz

Quartz and topaz are not easy to separate by eye, and are sometimes impossible when the quartz is a true topaz color. There is a big difference in price between the two and anyone describing quartz as topaz, however innocently, may well be in trouble.

Topaz is quite a different mineral, which is harder than quartz. Because of this, a drop of water will not spread on topaz but will spread on quartz. Clean the stone as effectively as possible with a cloth or handkerchief to remove all trace of grease. It must be dry before the test. Then place a spot of clean water on it with a thin glass or metal rod.

On stones with a hardness of less than 7 on the Mohs scale, the water is dispersed. On harder stones it will remain a globule. The harder the stone the more rounded will be the globule.

2011 SCVGMS Calendar



Field Trip Schedule

For more information about the field trips below, please contact Dean Welder at fieldtrips@scvgms.org

June 25th Founder's Day Picnic at the Cabana Club

June 28th General meeting at 7:45 PM. Silent Auction throughout the meeting. Please bring something to donate to the silent auction, and don't forget your checkbook or cash. Great bargains.

June 30th Board meeting at 7:30 PM, Hosted by Chuck Boblenz and David Lowe

July 26th General meeting at 7:45 PM.

July 28th Board meeting at 7:30 PM hosted by Michael Paone

August 23rd General meeting at 7:45 PM.

August 25th Board meeting at 7:30 PM, hosted by Carol Pimentel.

September 27th General meeting at 7:45 PM.

September 29th Board meeting at 7:30 PM hosted by Art Pimentel

October 1st– North Bay Field Trip meeting in Vallejo.

October 25th General meeting at 7:45 PM.

October 27th Board meeting at 7:30 PM, hosted by Dean Welder

November 22nd General meeting at 7:45 PM and Board meeting immediately following general meeting. Silent Auction throughout the evening. Please bring items to donate to the silent auction. They can be rock-related or not. Election of 2012 officers and board of directors throughout the evening. Board meeting immediately following the general meeting.

December 6th Installation Dinner at the Cabana Club

December 8th Board meeting at 7:30 PM, hosted by Randy Harris

June 11th –12th Linka Mine Austin NV for fluorescent minerals, other minerals, and graptolites

June 17th-20th Black Rock Desert for limb casts, petrified wood, jaspers, opal, and calcite

June 25th -26th Meadow Lake, for Chalco, arsenopyrite, and viewing petroglyphs

June 29th– July 4th Madras, OR for annual Pow Wow for various collecting trips

July 16th-17th, Middlegate NV for fossils, petrified wood, and tour of Ochtysosaur State Park

July 23rd-24th, Sump and Monte Cristo, NV for minerals

July 29th-31st, Covello, CA for Jade

August 13th, Jade Cove, CA for Jade

Sept. 2nd – 5th, Snyder's Pow Wow, Valley Springs, CA

Sept 9th – 11th Black Rock Desert, NV for geodes, petrified wood, Christmas agate, and fossil leaves

September 11th, Grimes Pt/ Fallon area, NV for jasper, agate, and rhyolite

Sept 17th , Shell Beach, CA for jasper and whale-bone

September 30th, Gladding McBean Mine Tour, Lincoln, CA

October 21st –23rd, Fernley, NV for various minerals.

Let's visit a show

CFMS Club Show Calendar



June 3-5 - WOODLAND HILLS, CA, Rockatomics Gem and Mineral Society, Pierce College, 20800 Victory Blvd, Hours: 9-5 daily, Gary Levitt (818) 993-3802, (cell) (818) 321-6290, Email: Show@Rockatomics.org, Website: www.Rockatomics.org

June 4-5 - GLENDORA, CA, Glendora Gems, Goddard Middle School, 859 East Sierra Madre, Hours: Sat. 10-5; Sun. 10-4, Bonnie Bidwell (626) 963-4638, Email: Ybidwell2@aol.com

June 4-5 - LA HABRA, CA, North Orange County Gem and Mineral Society, La Habra Community Center, 101 W. La Habra Blvd., Hours: 10-5 daily, Dave Swarton (626) 912-1531, Email: s_wanni3@adelphia.net, Website: www.nocgms.com

July 9-10 - CULVER CITY, CA, Culver City Rock & Mineral Club, Veterans Memorial Auditorium, 4117 Overland Ave (Overland & Culver), Hours: Sat 10-6; Sun 10-5, Robert Thirlaway, Website: <http://www.CulverCityRocks.org>

August 5-7 - NIPOMO, CA, Orcutt Mineral Society, St. Joseph's Church Recreation Hall, 298 S. Thompson Ave., Hours: 10-5 daily, Gloria Dana (805)929-6429, Email: info@onsinc.org, Website: www.omsinc.org

August 7-8, SAN FRANCISCO, CA, San Francisco Gem & Mineral Society, Presidio Golden Gate Club, 135 Fisher Loop, Hours: Sat. 10-6; Sun. 10-5, Carleen Mont-Eton (415)564-4230, -Email: publicity@show.sfgms.org, Website: www.sfgms.org

September 2-5 - FORT BRAGG, CA, Mendocino Coast Gem & Mineral Society, Town Hall, 363 N. Main St, (corner of Main & Laurel), Hours: Fri-Sun 10-6; Mon 10-4, Jerry Sommer (707) 917-1833

September 10-11 - DOWNEY, CA, Delvers Gem & Mineral Society, Woman's Club of Downey, 9813 Paramount Blvd., Hours: Sat 10-6; Sun 10-4, Guynell Miller (562) 633-0614

September 17-18 - STOCKTON, CA, Stockton Lapidary & Mineral Club, Scottish Rite Masonic Center, 33 W. Alpine Avenue, Hours: 10-5 Daily, Jan Bradley or Dorothy Tonnacliff (209) 629-3837 / (209) 603-4539, Email: slmcshow@juno.com, Website: <http://www.stocktonlapidary.com>

September 24-25 - MONTEREY, CA, Carmel Valley Gem & Mineral Society, Monterey Fairgrounds, 2004 Fairgrounds Road, Hours: Sat 10-6; Sun 10-5, Matt Biewer (831) 659-4156, Email: mattbiewer@aol.com, Website: <http://www.cvgms.org>

October 8-9 - TRONA, CA, Searles Lake Gem & Mineral Society, 13337 Main Street, Hours: Sat; 7:30-5; Sun. 7:30-4, Jim & Bonnie Fairchild (760) 372-5356, Email: slgms@iwvisp.com, Website: www1.iwvisp.com/tronagemclub

October 15-16 - ANDERSON, CA, Shasta Gem & Mineral Society, Shasta District Fairgrounds, Briggs Street, Hours: Sat. 9-5; Sun. 10-4, Steve Puderbaugh (530) 365-4000; Cell (530) 604-2951, Email: steve@applyaline.com, Website: www.www.shastagemandmineral.com

October 15-16 - PLACERVILLE, CA, El Dorado County Gem & Mineral Society, El Dorado County Fairgrounds 100 Placerville Drive, Hours: 10-5 daily, Karen Newlin, (530) 676-2472, Email: info@rockandgemshow.org, Show Website: www.rockandgemshow.org

October 15-16 - SANTA ROSA, CA, Santa Rosa Mineral & Gem Society, Veterans Memorial Auditorium, 1351 Maple Ave, Hours: Sat. 10-6; Sun 10-5, Debbie Granat (707) 542-1651, Email: santarosarockshow@hotmail.com, Website: www.srmgs.org

October 15-16 - WHITTIER, CA, Whittier Gem & Mineral Society, Whittier Community Center, 7630 Washington, Hours: 10-5 Daily, Marcia Goetz (626) 260-7239, Email: joemar1@verizon.net

November 5-6 - LANCASTER, CA, Palmdale Gem & Mineral Club, Antelope Valley Fairgrounds, 2551 West Ave. H & Hwy 14, Hours: 9-5 daily, Cheri George, (562) 243-8470, Email: lizardwoman3@yahoo.com, Website: www.palmdalegemandmineral.com

November 5-6 - SAN DIEGO, CA, San Diego Mineral & Gem Society, Al Bahr Shrine Center, 5440 Kearny Mesa Road, Hours: Sat. 9:30-5; Sun. 10-4, Bob Hancock, (619) 461-5783, (619) 889-6886 cell, Email: rhbobhancock@cs.com, Website: www.sdmg.org

November 19-20 - OXNARD, CA, Oxnard Gem & Mineral Society, Oxnard Performing Arts Center, 800 Hobson Way, Hours: Sat 9-5; Sun 10-4, Norb Kinsler, (805) 644-6450, Email: show_info@oxnardgem.com, Website: <http://www.oxnardgem.com>

2011 Federation Shows

AFMS and Eastern Federation show, July 7-10, 2011 in Syracuse New York

Midwest Federation show, September 8-10, 2011 in Toledo, Ohio

Northwest Federation show, July 29-31, 2011 in Chehalis, Oregon

Rocky Mountain Federation show, June 24-26, 2011 in Colorado Spring, Colorado

2012 Federation Shows

Eastern Federation show, September 15-16, 2012 in Harrisburg, PA

AFMS and Midwest Federation show, July 26-29, 2012 in Wayzata, MN

Northwest Federation show, May 18-20, 2012 in Kennewick, WA

California Federation show, July 13-15 in Riverside CA

2013 Federation Shows

Eastern Federation show, April 5-7 in Long Island, New York

FEDERATION REPORT

Location: CFMS Meeting at Anderson, CA: May 14, 2011

The California Federation of Mineralogical Societies (CFMS) meeting was called to order by the 1st VP, Susan Chaisson-Walblom, at 9:00 AM.

The CFMS is composed of California, Arizona and Nevada and represents 101 clubs and societies: 2 from Arizona, 3 from Nevada and 96 from California. Fifty-three clubs/societies were present and established a quorum.

An agenda was presented and adopted for the meeting.

Some highlights are:

The Executive Committee presented recommendations for: (1) changing the CFMS Show contract and show manual to make it more attractive to hosts of the show, (2) purchasing oxygen and acetylene tanks for the Earth Science Studies program and (3) approval of the High Desert Rockers of Carson City, NV as new members of the Federation. All were approved by the attendees.

The Valley Prospectors provided a bid to host the 2012 CFMS show in Riverside on, or about, July 13th through 15th. The bid was approved by the attendees.

The CFMS Program Library received five new programs:

Jewelry Workshops: Intermediate Silversmithing DVD's making metal bead bracelets + twisted square wire projects.

Wonderful World of Agates Symposium: Five DVD's covering (a) Mexican and German agates, banded agates and agate formation; (b) "Lakers, Thundereggs + mining agates and Jasper, (c) Australian agate hunting + more "Lakers", (d) Sweetwater agates, coconuts + Fairburn's, (e) Tribute to June Zeitner + agate displays around the world.

Introduction to Intarsia: DVD. Basic lapidary skills + the use of cabochons to make the intarsia.

Intricate Intarsia: DVD. Detailed instructions for a complicated cabochon size mosaic.

Dinosaur Collection (National Geographic): 5 DVD's. Sea Monsters, Dinosaurs Decoded, T-Rex Walks Again, Bizarre Dinosaurs + Dino Anatomy.

Some interesting trivia:

The first CFMS meeting occurred at Riverside in 1936.

The first CFMS President was John Wilhelm.

The first woman CFMS President was Martha Craig in 1953

The 75th CFMS Show was held May 13th through

15th 2011 at Anderson, CA.

The Golden Bear gold nugget was purchased for \$300 shortly after the first CFMS show in Riverside in 1936. Omar Lutz had acquired the nugget in 1934 and sold it to the Federation.

Ruth Bailey is the Parliamentarian and on the By-Laws Committee of the CFMS in addition to being our Federation Director; since she was acting in her role as Parliamentarian I represented our Society as Alternate Federation Director.

Respectfully submitted,

Chuck Boblenz

SCVGMs Alternate Federation Director

Live Auction Rocks, Slabs, Bargains

Lots of rocks, lots of equipment, lots of bargains, and lots of fun.

It's here again, the Annual Rock Auction, June 20 at the Centre Concord in Concord brought to you by the Contra Costa Mineral & Gem Society.

Join us for a wham-bam evening of fast moving action, excitement and fun. Bring your enthusiasm – and your money! (Proceeds go to local scholarships.)

There will be plenty of rocks and slabs, plenty of jewelry and findings, plenty of equipment, plenty of food - *and plenty of deals.*

Don't be left out. These deals only come about once a year. This is the time to stock up at unbeatable prices. You can't win if you don't bid; and you can't bid if you don't come. All items go home with the highest bidder.

Auctions starts at 7:30 pm (preview at 7:00), June 20, at the Centre Concord, 5298 Clayton Road, Concord (that's the same location as the CCM&GS Gem & Mineral Show).

Proceeds go to local scholarships.

See you this June -- at the Auction!

Harry Nichandros
CCM&GS

Safety

RV Safety—Motoring Accidents

by De & Mary Sharp
via CFMS newsletter 5-2011

Driving accidents are among the most common emergencies RV drivers face. Good defensive driving will help avoid accidents caused by others, but here are some things we can do to avoid causing them ourselves.

First and perhaps most important, don't follow too closely. A distance that is safe in an auto isn't enough in an RV because of the increased size and weight of the vehicle.

Try to leave yourself an escape zone. Always be aware of the road shoulder. Check to ensure that it is open and can support the weight of an RV. Be sure that it is wide enough.

Drive courteously. More than one accident has been caused by an irritated motorist who became frustrated by having to follow a slower RV for miles over a winding mountain road or who couldn't see clearly to pass because the larger vehicle was hugging the center line. On mountain roads pull out frequently to allow following traffic to pass, and leave plenty of room for a passing vehicle to pull back into the lane in front of you.

If you are tired, stop. Distance driving is very tiring. Take frequent breaks during the day and call it a day when you notice fatigue is setting in. While stopped for a break, take a couple minutes to walk around your rig and make a visual check of the tires. Take a quick glance under the vehicle for leaks. This takes very little time but gives your body an extra stretch that will help relieve muscles that are cramped and tired from long periods of driving. Happy motoring!

Originally published in the *CFMS Newsletter*, 12/90

Emeralds—The Caroline Emperor

via Pick Hammer News, 3/2011,

Emeralds are rare stones, found only in a few locations around the world where a superheated fluid carrying the element beryllium migrates through the rocks which contain chromium. Most emeralds are found in Columbia, Russia, Brazil and Afghanistan, but there are pockets of emeralds in North Carolina in three known emerald districts.

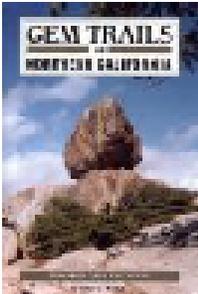
Near the little community of Hiddenite (named for a paler stone that resembles emerald) in Alexander County, Terry Ledford, 53, found a roughly 2-inch chunk of emerald while using his backhoe on the farm of his business partner, W. Renn Adams. The farm once well known among treasure hunters, when the Adams family charged \$3 a day to shovel for small samples of the green stone. That day in August, 2009, Ledford had worked his way down a hole in the earth and through a quartz vein approximately 14 feet below the surface. At first he thought the stone was part of a broken 7-Up bottle. It wasn't. It was a very big emerald crystal weigh in 310 carats.

The stone was dark in color, which ensured that when it was cut with facets that would allow the light into the gems core it would exhibit an intense green hue. The stone was cut into a 65-carat stone which has been named the Carolina Emperor. It is the largest cut emerald ever found in N. America. And so large that it is being compared with the crown jewels of Russian empress Catherine the Great . A museum and some private collectors have been in contact regarding the purchase of the stone.

Information for this article came from the www.cnn.com; www.upi.com; www.desertnews.com; and www.cbsnews.com

Books

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



Tools

- ◆ gem scoop
- ◆ hammers
- ◆ grit



Rocks

- ◆ misc. slabs
- ◆ mineral specimens
- ◆ polished display pieces



Dean & Karen Welder
Members SCVGMS
www.peregrine-rocks.com

Gypsum and Anhydrite

By Lawrence H. Skelton, Wichita, KS
Via Quarry Quips, 03/2011

The mineral Gypsum and its waterless companion, anhydrite, are among the more often encountered minerals found in the earth's crust. Together, they are the earth's most common sulfate mineral. Gypsum is calcium sulfate, $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ and anhydrite is calcium sulfate or CaSO_4 . Both minerals principally form as sedimentary rocks from the evaporation of seawater. The name derives from the Greek word *gypos* that means chalk or plaster. In 2008, gypsum was mined from 51 mines located in 29 different states. U.S. estimated production that year was 12.9 million tons. The world's leading producer is the Peoples Republic of China, which is followed by 88 other nations.

Gypsum was used as mortar in construction of the pyramids in ancient Egypt and has a variety of modern uses. Among them are: drywall, plaster-of-Paris which is used both for art and medical purposes, fertilizer and soil conditioner for alkaline soils, in foods (a coagulant in tofu and look for calcium sulfate in food ingredients), glass making, smelting, as a filler in paper products, in toothpaste, blackboard "chalk", in foot creams, shampoos, and other hair-care products. Gypsum processing factories usually are located near mines, both being centrally located within a given marketing area and in order to economize in transporting a heavy, bulky product of relatively low cash value.

Gypsum has a Mohs hardness of 2.0, specific gravity of 2.2-2.4 and crystallizes in the monoclinic system. Anhydrite displays Mohs hardness of 3.0-3.5, specific gravity of 2.7-3.0 and crystallizes in the orthorhombic system. Anhydrite can naturally absorb groundwater and convert to gypsum. When it does so, it expands 33% to 62% of its original volume and distorts overlying strata. Both minerals are soluble in ground water causing creation of a karst topography of sinkholes and caverns.

Gypsum may occur in any of five natural forms, selenite, satin spar, alabaster, gypsite, and rock gypsum. Selenite is the transparent, crystalline form, which occurs in clay or shale as single crys-

tals, rosettes, or fishtail twins. Its exterior surface usually is pitted or striated and the interior often contains shale or clay inclusions. Satin spar has a fibrous, crystalline form and occurs in layers that sometimes are several inches thick. The fibers are oriented at right angles to the layering. Satin Spar may form as layers within rock gypsum and is sometimes replaced by calcite forming a pseudomorph after satin spar. Alabaster is a massive, fine-grained, white to pinkish, translucent form of gypsum. It is used for sculptures and as a building stone in arid zones. Gypsite is an earthy, granular form of gypsum that may form at the earth's surface or in low, marshy areas. It is formed by the evaporation of ground water that has become saturated with calcium sulfate. It is non-coherent, light gray in color and can be excavated with a shovel. Gypsite deposits may be several feet thick. Rock gypsum is massive, thick-bedded, grey to white or rarely pink, coarsely crystalline rock. It forms deposits ranging in thickness from a few inches to as much as 1325 feet (in New Mexico). The 275 square mile White Sands desert in New Mexico is composed of sand sized gypsum grains.

Gypsum and anhydrite both are precipitated by evaporation of seawater. The average concentration of all dissolved minerals in seawater is 35,000 parts per million (3.5%) of which calcium sulfate comprises 3.60%. Evaporation of 1,428 feet of seawater is required to precipitate one foot of gypsum. Gypsum also may be deposited by hot springs, volcanic vapors, and sulfate solutions reacting with limestone or other calcium-bearing minerals. Whether gypsum or anhydrite is precipitated in a sedimentary basin depends on water temperature and degree of salinity. When evaporation results in salinity of 3.35 times that of normal seawater, gypsum forms and will continue to do so until a concentration of 4.8 times normal concentration. Above that, Anhydrite forms. Once halite precipitation begins, only anhydrite will form. Water temperature exceeding 42 degrees C. (ca 105degrees F) causes precipitation of anhydrite. Cooler temperatures result in formation of gypsum. Subsequent hydration or dehydration may result in one changing to the other. Gypsum presently mined in Kansas averages 8 to 9 feet in thickness in the Blue Rapids area in

continued from page 10

Marshall County and ranges from 10-30 feet in thickness in the Medicine Lodge area in Barber County. Anhydrite ranges in thickness from 100 to 500 feet or more beneath the salt beds in a section extending from eastern Dickinson to western Ellis counties. Obviously, the Permian age deposition basin holding these rocks was not sufficiently deep (over 14000 feet) to precipitate such quantities in a single evaporation phase. There were in fact, several phases of flooding and subsequent evaporation of this Permian inland sea. A connection to the ocean is thought to have existed in the West Texas/New Mexico area where high tides and severe storms repeatedly refilled the evaporative basin in what is now Kansas and Oklahoma. Dry periods permitted the deposition of thin layers of red clay and mud on the surface of the exposed beds of evaporative minerals, layers which were covered by more gypsum, anhydrite or salt during the next flooding phase. These clay and mud deposits formed red or gray lines visible in gypsum mines.

Kansas' gypsum deposits occur in strata of Permian age and in the Oaks shale, the uppermost member of the Admire group which recent research has re-designated to be of upper Pennsylvanian age. Gypsum seams and selenite crystals are found in Cretaceous age shale formation in western Kansas. Gypsum and anhydrite are widely distributed in the Permian age (in descending order) Blaine, Wellington and Easley Creek formations. At present, commercial mining is carried on in the Blaine Formation in the Medicine Lodge area of Barber County and in the Easley Creek Shale formation at Blue Rapids, Marshall county. Gypsum was mined from the Wellington formation early in the past century. Gypsite was excavated at a site (no longer to be found) north of Mulvane. Since gypsum is soluble in ground water, collapsed and/or crumbled layers of gypsum form an aquifer, which supplies water to parts of the eastern Wichita area. The calcium and sulfate contribute to the hardness and sometimes sulfuric taste and odor of that water.

Potentially useful gypsum deposits in Kansas were first identified in 1854, along the Smoky Hill River probably in present Saline County. During the fol-

lowing century, gypsum or gypsite was mined at some time in 19 different locations in 10 different counties: Barber, Butler, Clay, Dickinson, Harvey, Marion, Marshall, Saline, Sedgewick, and Sumner. During the 67 years from 1889, when the state began keeping mineral production records until 1956, Kansas produced 8.4 million tons of gypsum. Later production has been rolled into total amounts of 'rock products' in order to avoid release of "proprietary (e.g. economic) data" submitted by very competitive companies and industries.

Gypsum is and has been an important contributor to the economy of Kansas and other producing states. Although supplies are not infinite, the volume of this important resource is sufficient for centuries to come. In use at least since the pyramids were constructed, gypsum truly is the 'rock of ages.'

Recommended reading:

- Bates, R.L., 1960, *Geology of the Industrial Rocks and Minerals*: New York, Harper and Brothers, pp. 201-212.
- Kulstad, R.O., Fairchild, P., McGregor, D., 1956, *Gypsum in Kansas*: Kansas Geological Survey, Bulletin no. 113, 110p.
- Schoewe, W.H., 1958, *The Geography of Kansas, Part IV: Economic Geography: Mineral Resources*: Kansas Academy of Science, Transactions, Vol 61, No. 4, pp. 434-437.
- Ver Wiebe, W.A., 1937, *The Wellington Formation of Central Kansas*: Municipal University of Wichita, Vol. XII, No 5, 18p.

Ten Commandments of Using Acid

Source: Rockhound Rambling, 5/2009; via Rock Chips, 3/2011; via Beehive Buzzer, 3/2011

1. Never add acid to water
2. Always keep container of water nearby for neutralizing solutions in case of a spill.
3. Never use acid with bleach
4. Always use acids in a well ventilated area.
5. Always use inferior specimens for experimentation
6. Always treat a spill as if it is the worst acid you are using.
7. Always wear protective clothing and use proper equipment
8. Always neutralize acid solutions before disposing of them
9. Always use and store acids carefully (well labeled and out of reach of children).

Safer Collecting and Some Things to Make You Think!

by Andrew Brodeur, Connecticut Valley Mineral Club, via AFMS Newsletter, 2/2011.

Everything we do has a certain amount of risk involved and mineral collecting is no different. We are constantly going to remote places with rough unfamiliar terrain and once you start getting comfortable with them is when the bad stuff can happen! Complacency will get you in trouble every time but with a little planning, maybe you won't come back with more than a scrape and sore knees.

We go to some fairly remote places and the more remote they are the more you need to be thinking about the moves you are making and staying safe, no mineral specimen is worth an injury in the field! In my opinion the most dangerous places we go as a club are the Chester emery Mines, Shaft 10 in Hardwick and the Loudville Lead Mines. Chester has steep, rough terrain, you are quite a distance into the woods and there is NO CELL PHONE CONTACT!. Shaft 10 has similar hazards as well as snakes and if you fall there, you are going for quite a rough ride all the way to the bottom. Loudville, dangerous....? Yes Loudville has a certain amount of danger, mostly the distance away from the road and a couple rough spots depending on where you go there.

I think the most valuable thing you can know when you go out collecting is know where you are, sounds funny doesn't it? How many times have you headed out on a field trip following the trip leader and the only concern is not losing sight of his vehicle or the guy in front of you, you get to the location and off you go. If something happened to you or another person and you needed help, could you tell a rescuer or emergency person where you are and how to get to you??? KNOW WHERE YOU ARE!!! Location, Street, and Town, three very simple and very important things that will allow help to get to you faster. You should also notice some landmarks on your way in, this will also help you tell people how to get to you. When you dial 911 from a cell phone it doesn't always go to the closest police station, it may go to the closest State Police Barracks and it may be in a different town. If you can't tell them how to get to you, you have just lost precious time and you just added being lost to the problem, and your rescuers have to try and figure out where you are and get you out too!

If you need help, you need to know what to tell the people, what is your emergency?? The type of injury, what is being done for them in the field, how far in the woods, adult, child, male, female, HOW BIG ARE THEY?? These are all important things for the rescuers

to know, getting somebody out of a rough remote location isn't just a 2 man job in fact it could take a dozen or more rescuers to get one person out of a bad situation. If you don't have a cell connection and you need to send another person for help, they will have to know all of the afore mentioned things to get to help and to lead them back to the location to help the injured person. If you can send 2 people on this mission its better just in case something happens to one of them. They should try to get to the car as fast as possible WITHOUT getting hurt in the process. Try to make a mental note of the closest house or store as you drive in to the site just in case you need to go for help and a phone.

If a person can't get up on their own after an accident, don't move them! If they aren't alert to PERSON, PLACE or TIME and other everyday things they should know, they shouldn't be moved. These are signs of a serious head injury and moving them could be very dangerous. Keep them warm, dry, and awake. If the person is unconscious try and place them on their left side so if they vomit, they don't aspirate it into their lungs. It would be a shame to get them out alive only to have them die of a respiratory infection a week later. If you have the option of staying with the injured person and calling or sending another person for help, you should do just that, getting the person and all your gear out of the woods and driving them to a hospital yourself wastes precious time in them receiving the critical care they may need, LEAVE IT TO THE PROS!

If you are collecting either alone or in a group, there is some information that should be shared before you go out. If you are going out alone or in a group, tell people where you are going and what time you plan on being back, if they are more than an hour over due you should be making a phone call to the local or state police so they can see if their vehicle is still where they planned on going. If you are leading a group, you should know who is a diabetic or allergic to bees just in case there is a problem and do they carry their meds with them? Is there is anybody with you that has first aid kit or any medical training? Don't take unnecessary chances look up before you settle down to do any collecting, are you sitting under a hanging dead branch or tree? Use your head and eyes and be aware of your surroundings, know where you are and what's around you. Don't be afraid to tell the person near you if they are in a bad spot, you may see something they don't. With just a little knowledge and planning you can make your collecting trips much safer for yourself and others in your group, nothing can put a damper on a great day faster than an injury or incident that might have been preventable. Have fun, be safe and come to the next meeting with a good story about your collecting trip.

Collection Types

by Thomas Pallanta, Jr.
via Gem Cutters News, 3/2011; via Rock Chatter, 2/2011

One of the great advantages of rock and mineral collecting is the range and variety of collecting that you can do. There are various ranges of generalized or specialized collecting. This gives the collector a considerable selection of activities. Here are some examples to guide you.

The General Collection

Just about everyone starts out this way. You quite simply collect whatever catches your fancy. Such collections are full of variety and many collectors stay on this particular route.

The Rock Type Collection

A collection like this is usually for the geologist or the serious amateur geologist. One collects rocks of the various types for study. The collection can be general for someone who is interested in learning the various geological processes. Then again, one can specialize ... like "Volcanic Materials".

The Single Mineral Species Collection

In this case one collects specimens of one mineral species in all of its known forms from as many locations from around the world. For example, I have a fifty specimen collection of smithsonites.

The Single Mineral Class Collection

Also called "Single Mineral Family" collections. Here you collect all minerals of a specific mineral class such as sulfides, carbonates, oxides, phosphates, etc.

The Single Chemical Elements Collection

These are usually collections based on a single chemical element like copper, lead, zinc, iron, uranium, etc. In this case you collect all mineral species which have that particular element as their main component.

The Pseudomorph Collection

Pseudomorphs are minerals that have the crystal form of another species through alteration or chemical replacement. One example is pyrite replaced by limonite.

The Crystal Collection

In this case, one simply collects crystals. One can specialize in collecting the various forms of a single family like calcite or quartz. On the other hand, one can simply collect crystals from the various crystal systems (cubic, hexagonal, rhombohedral, tetragonal, orthorhombic, monoclinic, and triclinic). Then again, you could just collect whatever types of crystals that catch your fancy.

The Dana Collection

Here one strives to collect one of every mineral species listed in the table of "Dana's Manual of Mineralogy". This is usually a collection for the serious amateur mineralogist.

The Ore Minerals Collection

This is where one collects the various types of ores or ore-bearing minerals. One can specialize in collecting a single family of ores such as copper ores. On the other hand, you could generalize. This is a good area of collecting if you have an interest in mining.

The Ultraviolet Minerals Collections

Also called "fluorescent mineral collection". Here a person specializes in collecting minerals that fluoresce under the ultraviolet light. You can collect all of the various kinds of fluorescent minerals or you could specialize. Some collectors try to get specimens of minerals from a single location like Franklin, NJ. Then there are people who specialize in minerals that only fluoresce under long-wave or short-wave ultraviolet light.

The Gemstone Collection

As the name indicates, you collect gem materials. You can collect a single family, like feldspar gems. One could also collect various types of rough gem minerals and crystals. Only the very rich tend to collect precious gems. That is the acme of mineral collecting.

These are just a few of the different types of collection one could enjoy. Remember, whichever collection type you choose, document your specimens.

Chrysanthemum Stone

By Brenda Johnson

Via Pick Hammer News, via Ozark Earth Science Club News, 10/06

"Chrysanthemum Stone" is named for the unique patterns that look like the fall flower. Sometimes called "Chinese Writing Stone" the patterns also resemble that of Chinese writing. It occurs naturally in the Hunan region of China. Most of the specimens are collected from river beds there.

During the Mesozoic era, deposition of a thick stratum of mud rich in organic materials including flora and fauna occurred at the bottom of the sea. Calcium carbonate (calcite) and abundant strontium sulphate (Celestite) precipitated in the ooze at the bottom. As the layers were compacted, these sediments were buried by continuous deposition of more mud. At these lower depths it allowed radical growth of celestite formations that remained as patterns in the solidified limestone. The actual flowers within the stone can contain come ten kinds of trace elements such as selenium, strontium, gold, silver and bismuth. The "flowers" embedded in the grey limestone consist of minerals celestite and calcite (the "petal") and chert (the "stamen").

Normally the floral design ranges from five to eight cm with the maximum being 50 cm. They vary in shape and the petals stretch out freely with different personalities. The material is found as boulders in a river and then broken open by workers and subsequently trimmed of excess rock and sometimes worked by artisans into ornate sculptures. These stones can be bought very reasonable through rock shops or on eBay. I understand they work up well in jewelry making, especially wire wrapping.

Santa Clara Valley Gem and Mineral Society

General meeting minutes

May 24, 2011

The May meeting of the Santa Clara Valley Gem and Mineral Society was called to order at 7:50 PM at the Belwood Cabana Club by President, Randy Harris. The minutes from the April meeting were approved as printed in the Breccia.

Announcements: Founder's Day Picnic reservations are due by June 1st. Dues are due by June 1st. June meeting will be a Silent Auction throughout the meeting. Everyone was asked to bring something to contribute to the Silent Auction, and reminded to bring cash or their checkbook. May board meeting will be at June Harris' home on May 26th at 7:30 PM. Everyone is welcome.

New Members: Rich Macias received his new member packet.

Correspondence: Show fliers from the Santa Lucia Rockhounds; postcard from the Underground Gold Miners Museum regarding their upcoming display on June 25-26 in Alleghany; Snyder's Pow Wow information, flier about new book on diamond inclusions.

Awards: Rockhound of the Month- Maxie Casey for all his work on the security for the show, chairing the faceters study group and joining the society's board of directors.

Officer, director, and show chairman's nametag swingers were distributed to people who held positions of leadership.

Show awards: Ruth Bailey presented awards to the following people their competitive entry.

Chuck Boblenz for his competitive display case of cabochons

Jian Zheng for her competitive single item entry of a carved chrysoprase leaf.

Kathy Alexander for two competitive entries: wirewrapping and silversmithing.

There were three more entries that were not awarded because the people were not present at the meeting to receive them. Stay tuned next month.

Federation Report: Ruth and Chuck Boblenz attended the CFMS meeting at the Anderson show. Camp Paradise was discussed. The club sponsored award, The Char Choate Award, was won by Chuck McGee.

Study Groups: Smithies will be meeting on the second Monday and Tuesday of the month, June 13 & 14. Faceters meet on the first Saturday of the month, June 4, at Max Casey's home. Call to RSVP. Mineraleers are on hiatus until September. See the Breccia for more details these and other study groups.

DRC: Pat Speece reported that the last rock sale netted \$496.25.

Hospitality: We had 30 members and 6 guests in attendance.

PLAC: No report

Field Trips: Randy Harris announced the next two upcoming field trips. See the Breccia for future field trip dates. More information about field trips can be obtained by emailing Dean Welder. No calls please.

2011 show: We had a wrap up meeting on May 19. We will be trying to establish a Facebook account for the club. If anyone has experience with Facebook, please see Frank Mullaney. Please make sure your show receipts are turned in for reimbursement to Frank Mullaney.

Member Displays: See the Breccia.

Meeting setup and tear down: Frank Mullaney asked for volunteers to commit to helping set up and tear down at monthly meetings.

Program for the evening was given by David Lowe. It was a video presentation on his trip to South Africa. Meeting adjourned at 9:30PM.

Respectfully submitted, June Harris, Secretary Pro-Tem

Santa Clara Valley Gem and Mineral Society
Board meeting minutes
May 26, 2011

The meeting was called to order at 7:45 PM at the home of June Harris.

Roll Call: All board members were present except Rick Kennedy, Maxie Casey and Dean Welder.

Minutes from April meeting: M/S/P to approve the minutes as read. (F. Mullaney, M. Mullaney)

Correspondence: None

Membership applications: M/S/P to accept Mike Summers and Jacquelyn Calderon as new members (F. Mullaney, M. Paone)

Treasurer's Report: Frank distributed the treasurer's report. He has renewed our CD. M/S/P to pay the bills presented (M. Mullaney, C. Boblenz).

Committee Reports:

Show 2011-2012: We reviewed the preliminary show financials. Discussed various issues with show participation and attendance. Reviewed suggestions of publicity consultant. Discussed changes to show raffle and door prizes.

Old Business:

Founder's day- Carol distributed a report and stated that only 25 people have signed up to attend the event. Randy is going to remind Amy De Masi that she signed up to run the Bingo game. Frank will pick up the Bingo cards, balls and hopper.

Officers and chairman's manual: Marc and David offered to proof read the manual. June needs to send it to them.

New Business:

Silent Auction: A change in the months that the silent auction will be held was discussed. M/S/P to move the silent auction from June and November to March and November.

Contests: The subject of having a monthly contest for members and guests to enter for displaying their lapidary items, minerals, fossils, etc. Marc and June will be working on guidelines for the contest. Awards will be given for a people's choice and an anonymous judging. Prizes will be given at the following meeting. Contest to start in July or August.

Science Fairs: The subject of offering a prize to local school district science fair winners who present an earth science entry was discussed. Various prize ideas were discussed. Marc to look into purchasing savings bonds, and he will be checking with the California Teachers Association regarding how to implement such as contest. Several school districts were discussed as possible districts to run a test of the contest.

Carving seminar with Matt Glasby: David Marshall is requesting that the club endorse a carving seminar/ demonstration with Matt Glasby. M/S/P to encourage David Marshall to organize and hold a carving seminar with Matt Glasby for our members with any extra spaces offered to other CFMS clubs. Attendees will need to cover the cost of Matt Glasby's services. The club will cover the rental of the Cabana Club, if needed. David will need to obtain signups with payment in advance. Checks to be made out to SCVGMS and SCVGMS will pay Matt his fee. David will need to work Bill Spence to arrange for CFMS insurance for the event. (M. Mullaney, M.Paone)

Old Record Books in the trailers: June is scanning the records into a computer. Once the scanning of a binder is completed. June will pull out any awards and photographs and the rest of the papers will be recycled. Photographs will be offered to the members before disposal. M/S/P to purchase a portable harddrive with at least 250 Gigabytes of memory for historical data to be stored on. (M. Mullaney, M. Paone) DVD's and flash drives will also have information uploaded on them. All information is to be stored in the club safe deposit box.

Meeting adjourned at 9:25 PM.

Respectfully submitted by June Harris, Secretary Pro-Tem

Santa Clara Valley Gem and Mineral Society
 Treasurer's Report
 May 25, 2011

Beginning Balance: \$34,532.24

Receipts:

Initiation Fee	\$ 10.00
DRC Sale	\$ 496.25
Dues	\$ 630.00
Interest	<u>\$.23</u>
Total Receipts	\$ 1136.48

Disbursements

Ice cream social	\$ 104.94
Kids Area	\$ 130.91
Editor's expense	\$ 21.79
Kids Area	\$ 67.60
Show set up	\$ 178.51
Kids Area	\$ 50.40
Show printed programs	\$ 25.54
Business card drawing	\$ 50.00
Show Banners	\$ 311.36
Smithies Study Group	\$ 30.60
Show security jackets	\$ 297.53
Show mementos	\$ 151.56
Show business cards	\$ 38.47
Hotel for Richard Wade	\$ 207.03
Show posters	\$ 27.03
Fairgrounds final bill	\$13040.50
2012 Deposit for Fairgrounds	\$ 1050.00
Roof Vents/Smithies workshop at P. Speece's	\$ 150.00
Raffle Mailings	\$ 50.65
Advertising postage	\$ 13.18
Show posters	\$ 54.64
May phone bill	\$ 26.27
Santa Clara County Tax Collector	\$ 159.03
Misc Show items	\$ 73.75
2012 show advertising	\$ 21.82
Secretary of State filing SI-100	\$ 20.00
Scholarship booth saw blades	\$ 55.72
Breccia postage	\$ 23.00
Breccia copying	\$ 42.05
Theater advertising	\$ 1100.00
CFMS meeting mileage	\$ 98.88
May Refreshments	<u>\$ 32.06</u>
Total Disbursements	\$17704.74

Ending balance \$17963.98