

# DiABLO



September 2003

**Contra  
Costa**

MINERAL + GEM SOC.  
WALNUT CREEK, CA +  
Concord, CA

## Diablo Diggins -September 2003

Thank you to everyone for meeting the early deadline. I am off to Alaska, going north. Due date for October is September 18<sup>th</sup>.

[maryhicks@comcast.net](mailto:maryhicks@comcast.net) or  
Mary Hicks, 2418 Larkin Ct.,  
Antioch, CA 94531

Articles are to be typed or printed,  
or use 12 font Times New Roman.

Submit type written hard copy or e-mail  
electronic documents. For electronic  
documents, PLEASE do not do any  
format, other than Times New Roman  
12 font and standard use Upper and  
Lower case and "enter" key for spaces.

### General Meeting Refreshments

Ardean Goulart  
Marlow & Ophelia Hicks  
Gene Holcomb  
Jane Holcomb  
Glen Hubbard  
Jim & Teresa Hurd  
Jim Hurst

### President's Message

By Ann Matthews

Board Meeting: **September 8.**  
Everyone is welcome.

Show Planning Meeting:  
**September 10.** Come help plan  
the show.

Regular Educational Meeting:  
**September 12.** Come, bring a  
friend.

Our club picnic: Sunday,  
**September 14.** Baldwin Park on  
Parkside in Concord. Map  
included in the bulletin. Come,  
bring family and friends. Just add  
more to your pot-luck dishes.  
Call **Betty Pankey** for more  
information.

Classes: **September 18 & 25.**  
Call **Mary Ann King** for more  
information.

September Field Trips: Check  
your bulletin or call **Dick  
Pankey** for more information.

Selection Committee for Officers  
for 2004 have a completed slate.  
My thanks to a great job by **Glen  
Mackenzie, Gene Holcomb, &  
Barrie Bieler.**

**October 10** meeting will be the  
**Annual Scholarship Auction**  
and voting for Officers for 2004.

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**NOVEMBER 1st and 2nd  
IS OUR SHOW**

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Everyone needs to help. Give  
**Sam Woolsey** a call to see what  
you can do. PLEASE do all you  
can to advertise our show.

WELCOME TO OUR NEW  
MEMBERS: Join in and have  
fun.

### Program September

By **Dave Kleesattel**

David is out of town and due to  
the early deadline this month the  
topic of the September program  
is not available at time we went  
to print. Come to the September  
meeting and enjoy what Dave  
will have organized for us all.  
Editor.

### ***PICNIC! PICNIC! Party! Party!***

Contra Costa Mineral & Gem  
Society  
ANNUAL PICNIC

By **Betty Pankey**, Hospitality

LOCATION: **Baldwin Park on  
Parkside Dr. in Concord**, across  
from the Concord Senior Center.

DATE: **Sunday, September 14**

TIME: **11:30 a.m. to ??**

SERVING: **We eat at 12:30.**

Please reserve this date for our  
annual club picnic. This is a  
great way to get acquainted with  
other members and share stories

about our hobby. As usual, we will have a potluck with soft drinks provided by the club. We will again play the ever-popular **rock bingo**. Watch for more details in the Diggins'.

## 2003 SEPTEMBER SHOW CORNER

By **Sam Woolsey**, Show Chair  
 ph: 925-837-3287  
 fax: 925-837-0846  
 e-mail: sdwools@earthlink.net

The show staff had its first informal get-together at Club President **Ann Matthews'** on Wednesday, August 6th. Attending was **Ann, "Matt" Matthews, myself, Bill McKay, Glen Hubbard, and Ron Fray.**

**Our next meeting will be held - same place, same time - on September 10th.** We hope to see most of the subcommittee chairs there to get the ball rolling for **November 1-2.**

**ATTENDANCE is the name of this year's game!** Our show dealer income is the fuel on which operate. We are very, very lucky to have **Mary Hicks** (with family and friends) to honcho the Friday night "feed" for set-up folks, dealers, displayers, and demonstrators. Show up (9: a.m.) to work all day and enjoy a free meal. (Of course - we do need volunteers for clean-up afterwards.)

Speaking of volunteers: **Hazel (Woolsey)** has prepared new **volunteer sign-up sheets** for all

the show work stations. They were available at the August meeting, and will be out on display at the September and October meetings. This doesn't give us much time to fill all the slots - so step up early and claim the spots (and times) of your choice.

Flyers (quarter-page and full size for bulletin boards), window signs, and advance tickets are now available. At \$2.00 admissions, "paid" advertising is just not cost effective. Let's flood the county with these low-cost notices to increase the "paid gate." Our dealers will appreciate the effort - and the business they represent - and the club will get wider exposure and maybe new members!

## Selection Committee for Slate of Officers for 2004

Officer Candidates for 2004  
 President: **Ann Matthews**  
 1st V.P.: **Dave Kleesattel**  
 2nd V.P.: **Dick Pankey**  
 Treasurer: **Eva Umholtz**  
 Federation Rep.: **Bob Pevahouse**  
 Secretary: **Mary Hicks**  
 Further candidates may be nominated from the floor.

Nominating Committee  
**Glen MacKenzie** 689-4589  
**Gene Holcomb** 798-0402  
**Tom Umholtz** 473-1477

## Board Meeting

By **Sharon Neuhauser**, Secretary  
 Board Meeting called by President **Ann Matthews** night

of August 8<sup>th</sup>. Meeting opened at 7:15PM with quorum present. Membership Chair **Jim Bufton** presented applications for memberships for **Catalina Wright and David & Sherie Current** all from Concord, CA. **Sam Woolsey** made a motion to approve the above, it was seconded and passed. **Welcome to our three new club Members!**

**Jim** also announced that **Kim Kleesattel** has accepted the position of Membership Chair.

**Sam Woolsey** has received payment from **Claude Huber Minerals**, who will be a good addition to our November Show. Meeting closed at 7:25PM.

## General Meeting

By **Sharon Neuhauser**, Secretary

Meeting opened at 7:40PM with **Glen Hubbard** leading us in the flag salute.

2<sup>nd</sup> Vice President **Dick Pankey** announced up coming rock swaps. See Bulletin for trips.

Federation Chair, **Bob Pevahouse** announced Camp Paradise weeks in September for learning about our hobbies and the CFMS Show next year in Mariposa. **Bob** also asked members who remember old time members **Bob & Jean Duncan** to send cards as they are both ill at this time.

Hospitality Chair **Betty Pankey** announced guests **David and Sherie Current, Woolsey's grandson and Mary Jernigan's little girl**. Birthday and Anniversary announcements were made. **Betty** asked all to save **September 14<sup>th</sup> for our Picnic at Baldwin Park at 11:30 AM. Potluck at 12:30PM**, everyone bring a good appetite. Also if you have an item to donate or the **Rock Bingo** it will be appreciated.

**Al Schleif** collected for missing badges. The Rock Drawing was held with guest **David Current** obtaining a yellow rock egg and **John Owen** choosing a geode.

President **Ann** enlightened us on her recent Las Vegas trip to participate in an Ice Cake Decorating Show. At the conference, **Ann** passed out little bags of apache tears to people from all over the world. These thought gifts went over well. Also she commented that she saw rock eggs in Las Vegas that sold from \$95 to \$600, quite extravagant, when you know they come less expensive in Quartzsite.

Membership Chair **Jim Bufton** announced new members, with **David and Sherie Current** present.

Display Chair **Lee King** asked us to view and vote on cabs and faceted materials.

**Kim Kleesattel** told us how she and **Dave** found the beautiful large piece of petrified wood displayed on the head table. **Kim** was thankful to **Sam Woolsey and Matt Matthews** who helped carry this wood out of Wall Canyon. What a great field trip they had.

Show Chair **Sam Woolsey** has sign up sheets for all of us to **volunteer at the November 1<sup>st</sup> and 2<sup>nd</sup> weekend show**. There are fliers to pass out, put in cars and in your front yard, leave at gas stations, grocery stores, libraries and doctor offices, where ever you travel in the next 2 months. Please help bring more attendance to our Show!

**Sam** also talked of the **Borox Mine & Museum** which is very interesting. When you are in the Mojave area, call ahead for open dates and times.

President **Ann** encouraged those cutting cabs to exhibit at our monthly meetings. The member with the most 1<sup>st</sup> place votes at the end of the year is awarded a silver Diablo Dan pin. The Diablo Dan pin is very pretty and distinguishes the winner as a skilled participant in our club.

Editor **Mary Hicks** took the microphone to ask that someone take over as Editor of our "Diablo Diggins" newsletter. She has been doing this activity for some years and wants to try her hand at something new. She will do the newsletter to the end

of the year and so there is plenty of time to get started as an assistant and get ready to take it over. She says it is fun and interesting and will be the new Editors back up for vacations. The editor does need a computer to do the job. Puts the master copy together and hands it over to **Mary Bufton** who publishes and mails the newsletter.

The club is also looking for a new secretary, this person needs to be able to type or have a computer. **Sharon** has enjoyed first hand knowledge of what's going on in the club and getting to know people better. It's time to give others a chance at this job. (By time the Bulletin was finalized, **Mary Hicks** threw her hat in the ring to be **Sharon's** successor.)

Both of these jobs are very important to the club, it takes a few hours each month but you are rewarding the whole club with information on our mutual interests. Please step forward and offer your assistance for next year, get involved and see what fun it can be!

Property Chair **Glen Hubbard** asked for assistance with a work force at **Connie Klein's** home on the following Monday.

Education Chair **Mary Ann King** asked everyone to save August 13 and 20 for Critters Night to make items for our show.

**Thursday September 18 and 25**  
**Ophelia Hicks** will teach 3 types of **making gem trees**. This class is limited to 10 people so sign up now. Call **Mary Ann @ 947-1550**, there is still room on the sign up sheet.

**October 16 and 23 is wire wrapping with Glen MacKenzie** always a challenge with great results and he is a good teacher.

**Mary Ann** thanked **Barrie Bieler, Joe Yarbrough and Bob Pevahouse** for teaching recent classes and each received a Diablo Dan Coffee Mug.

Ecology Chair **Glen MacKenzie** suggested we write our Congressman as we do not support bill S-546IHR2416. Government wants no more collecting of fossils or petrified wood.

**Barrie Bieler** presented the 1997 AFMS Awards Program, *Agates of Texas and Mexico*. Barrie had some comical comments of high tech row boats transporting the rock hounds across the river proceeding to a town not on any map and how it is a good idea to carry a compass. Many colorful specimens were seen of agate, seaweed agate, Chalcedony, petrified wood. Thanks for an interesting presentation.

President **Ann Matthews** and others had been to Needle Point, Texas and said do not pay a head of time if being taken to a

collecting area. If the advertisement asks up front for \$, skip it.

Meeting adjourned on an up beat with President **Ann** suggesting we Vote on cabs and other stones and proceed to refreshments and good conversation with members.

Have a happy, safe summer.

## Gem of the Month

From **Joel Arem's** *Gems and Jewelry*

Some of the worlds most famous sapphires come from India, in the Vale of Kashmir high in the Himalayas. The fine blue gems found here have been known for about 100 years, but because of the high elevation mining can be carried out only a few months of the year. Australia is known for its production of very dark blue and blue-green sapphires, especially from Anakie, Queensland. Corundum gem of other colors have also been mined here.

The world's largest blue star sapphire, the Star of India, exhibited at the American Museum of Natural History in New York, weighs 563 carats.

The blue color of sapphire is due to the presence of **iron and titanium**; other colors are produced by various impurities. Although the term "sapphire" refers to gems of various colors, the name comes from the word

"sapphirus," meaning "blue." The most highly esteemed sapphire-color is a medium blue with a slight tinge of violet.

## Membership

By **Jim Bufton**

## Birthdays

Marlow Hicks	9/2
Steve Pittman	9/4
John Rouze	9/9
Nate Sonnenthal	9/10
Bob Pevahouse	9/12
Dave Zabaldano	9/14
Sam Woolsey	9/16
Mark Herrenkohl	9/16
David Current	9/17
Joey Pevahouse	9/19
Naomi Morgan	9/21
Rollie Washburn	9/21
Ron Fray	9/25
Bruce Naylor	9/25
Aaron Pingree	9/25
Betty Carpenter	9/28
George Brown	9/29

## Anniversaries

Dave & Kathleen Cunningham	9/15
Cassandra Antkowiak	9/19
Georgia Tull	9/22
Ron & Leslie Fray	9/25

## Ecology Notes

By **Glen MacKenzie**,  
 Ecology Chair

The U.S. Senate has passed bill S 546 Paleontology Resources Act. The House of Representatives is

now considering that and their own bill HR 2416. If these bills pass in anywhere near their present form, it will probably mean an end to hobby collecting of fossils of all kinds including petrified wood, or risk losing your tools, your vehicle, or your freedom.

**Please write or fax, e-mail or telephone your Congress person, asking them to not support these bills.** Do it now, later will be too late!

Here are some headlines from the Bureau of Land Management's recent newsletter on another hot subject.

**West Mojave Plan draws heat:**  
(San Bernardino County Sunday 7/16/03)

Environmentalists, off-roaders square off at "the first of seven public meetings on a draft environmental impact report on the 9.3 million-acre West Mojave Plan the nation's largest habitat conservation proposal."

Environmentalists say the western Mojave Desert's most pristine areas should be fenced off from vehicles and livestock, but outdoor enthusiasts argue the vast region should be open to all.

**City will not endorse West Mojave Plan** (Ridgecrest Daily Independent 7/20/03) Ridgecrest City Councilman Steven Orgam

told attendees at a public hearing held at BLM offices Thursday, the City of Ridgecrest will not endorse the West Mojave Plan. The city is not convinced that the issues surrounding protecting endangered species has been addressed, and that includes the human species.

**November 1-2;  
Concord, CA.  
Contra Costa Mineral  
& Gem Society,  
Centre Concord,  
5298 Clayton Road.  
Hours: 10-5 both days.  
Sam Woolsey 925.837.3287  
e-mail: [sdwools@earthlink.net](mailto:sdwools@earthlink.net)**

## CFMS SHOWS

**September 20-21; Paso Robles, CA. Santa Lucia Rockhounds 12<sup>th</sup> Annual "Rockhound Roundup",** PioneerPark & Museum, 2010 Rickerside Avenue. Hours Sat. 10-6; Sun. 10-5. John McCabe 805.464.0528

**September 20-21; Redwood City, CA. Sequoia Gem & Mineral Society.** Community Activity Bldg., 1400 Roosevelt Street. 10-5 both days. Carol Corden cell phone 650-368-6351

**September 27-28; Downey, CA. Delvers Gem & Mineral Society.** Womens Club of Downey, 9813 Paramount Blvd. Saturday 10-6, Sunday 10-4. Earl Liston 562-865-1348.

**September 27-28; Monterey, CA. Carmel Valley Gem & Mineral Society.** Monterey Fairgrounds, 2004 Fairgrounds, 2004 Fairgrounds Road. Saturday 10-6 Sunday 10-5. Sky Paxton 831-663-6978 [sky@familystones.net](mailto:sky@familystones.net)

**September 27-28; Los Altos, CA. Peninsula Gem & Geology Society.** Rancho Shopping Center. Foothill Express Way & So. Springer Road. 9:30 AM - 4:45 PM Jo Burchard 650-493-9301. [jombur@msn.com](mailto:jombur@msn.com)

**October 1-13; Fresno, CA. Fresno Gem & Mineral Society.** Big Fresno Fair, 1121 S. Chance Ave.. 11 AM - 100M. Violet Wells 559-673-3908 [Fgms1@excite.com](mailto:Fgms1@excite.com)

**October 11-12; Trona, CA. Searles Lake Gem & Mineral Society, Sigem Show Building; 13337 Main St.**

Hours: Sat. 8-5; Sun. 8-4. Bonnie Fairchild 760.372.5356

**October 18-1; El Cajon, CA. El Cajon Gem & Mineral Society, "Treasure's of the Earth".** El Cajon Valley Masonic Hall, 695 Ballantyne. Hours: 10-5 both days. Mikki Santens 619.440.3201

**October 18; Canoga Park, CA. Woodland Hills Rock Chippers.** Canoga Park Community Center, 7248 Owensmouth Ave. 10-5. [show@rockchippers.org](mailto:show@rockchippers.org)

**October 18-19; Anderson, CA. Shasta Gem & Mineral Society.** 50<sup>th</sup> Anniversary, Shasta District Fairgrounds, 10-5 both days.

**October 18-19; Placerville, CA. El Dorado County Mineral & Gem, El Dorado County Fairgrounds.** Hours:

10-5 both days. Jackie Cerrato,  
530.677.2975.

**October 18-19; Santa Rosa, CA.**  
**Santa Rosa Mineral & Gem Society.**  
Santa Rosa Veteran's Memorial Bldg.  
1351 Maple Avenue. Saturday 10-6;  
Sunday 10-5. Pete Peterson 707-833-  
2683.

**October 18-19 Whittier, CA.**  
**Whittier Community Center.** 7630  
Washington Ave. Hours 10-5 both  
days. Jay Valle 626-934-9764

**November 1-2; Concord, CA.**  
**Contra Costa Mineral & Gem Society,**  
**Centre Concord,**  
**5298 Clayton Road.**  
Hours: 10-5 both days.

**Sam Woolsey**  
925.837.3287  
e-mail:  
[sdwools@earthlink.net](mailto:sdwools@earthlink.net)

**November 1-2; Oxnard, CA.**  
**Oxnard Gem & Mineral Society**  
**"California Gems" @ Oxnard**  
Performing Arts & Convention Center,  
800 Hobson Way. Hours: Sat. 9-5;  
Sun. 9-4. Lois Allmen 805.483.6871

**November 8-9; Yuba City, CA.**  
**Sutter Buttes Gem & Mineral**  
**Society "Festival of Gem &**  
**Minerals",** Yuba-Sutter Fairgrounds,  
442 Franklin Avenue. Hours: Sat. 9-5;  
Sun. 9-4. Barbara & Charles Brown  
916.652.4240

**November 15-16; Palmdale, CA.**  
**Palmdale Gem & Mineral Club.**  
Palmdale Elks Lodge @ 2705 E. Ave.  
Q. Hours: 9-5 both days. Gail Becker  
661.256.4689.

**November 21-23; Sacramento, CA.**  
**Sacramento Mineral Society (61<sup>st</sup>**  
**Show) Golden Harvest of Gems.**  
Scottish Rite Temple @ 6151 H Street.  
Hours: Fri. 9-5; Sat. 10-6; Sun. 10-4.  
Tom 916.729.1829

**November 29-30; Barstow, CA.**  
**Mojave Desert Gem & Mineral**  
**Society.** Barstow Community Center,  
841 S. Barstow Road. Hours: 10-5  
both days. Bob Depue 760.255.1030

**December 6-7; Orangevale, CA.**  
**American River Gem & Mineral**  
**Society.** Orangevale Grange Hall,  
5807 Walnut Avenue. Hours: 10-5  
both days. Paul Daly 916.725.6578

### Other regional shows.

Eastern-October 17-19, Poughkeepsie,  
NY

### Poet's Corner

By Shirley Schleif

Look at the girl,  
In the old fashion dress,  
Facing the sun,  
Shining out of the West.

I'll polish this one,  
Twill be my prize.  
And I'll see envy  
In other eyes.

Now grind just so  
And sand just right.  
Don't get it too hot  
Now for a polish bright.

A beautiful job,  
But how I cried.  
The picture I saw,  
It's on the other side.

### Disclosure of Beryllium Bulk Diffused Sapphire

Submitted by **Barrie Bieler**, from  
the Jewelers of America Quarterly,  
August 2003

Sapphires have been commonly  
heat treated for decades to improve  
their appearance. Now, the  
gemstone is being enhanced  
through a beryllium bulk diffusion  
process.

Common heat treatment uses very  
high temperatures, but adds no  
extra material to trigger a change of  
color. With the bulk diffusion  
process, a foreign material-  
beryllium-is added to alter the  
color.

This beryllium is introduced into a  
parcel of sapphires either as a flux  
(liquid containing beryllium), a  
beryllium powder, or fragments of  
chrysoberyl (a gemstone rich in  
beryllium). The parcel is then  
heated, and the beryllium diffuses  
into the gem and becomes part of  
the gem's crystal lattice, altering  
the gem's absorption properties and  
changing the color.

When the diffused color layer is  
extremely deep or penetrates the  
gemstone completely, the  
enhancement can be considered  
very stable. But when the diffusion  
process results in a shallow color  
penetration, there are care and  
handling concerns; chips or minor  
repolishing may result in the  
removal of surface color. Because  
of this, it is critical that all parties  
involved be made aware that a

sapphire has been beryllium diffusion treated.

It is also important to note that the beryllium bulk diffusion process can also be used to produce blue sapphires and red corundum (ruby). Corundum is the gemological species, or gem family name, to which sapphire and ruby belong.

To date, identified quantities of blue and red beryllium diffused corundum have been small compared to treated yellow, orange and pink-orange colors. But, as with any emerging treatment method, this may change, and we may see growing numbers of blue and red corundum on the market resulting from this treatment.

[www.jewelers.org](http://www.jewelers.org)

## A Brief History of Copper Smelting

Condensed from an article by Gary Dillard in the American Mining Heritage, February 2003

The most expensive part of a copper-mining complex is the smelter. The process of getting copper out of sulfide ores also presents the greatest potential for pollution. Some of the earliest copper smelters in the West were made of simple adobe, with the charge of rich ore melted down by charcoal.

To be smelted, copper ore must be heated to more than 2,000 degrees Fahrenheit. This melts the copper and the iron that forms the typical

ore. The iron, being lighter, floats to the top and is skimmed off as a "slag."

Today it is not unusual for a manufacturing application to create copper wire that is far finer than a human hair and to require that the copper be 99.999 percent pure. In the industry, that's known as "five 9s" copper.

In the earliest days of Western copper mining, some ore was carted to a railhead and freighted to a port to be shipped to Swansea, Wales for smelting and refining. But in the 1880s, as demand for copper grew because of electricity and its various appliances, there was both need and affordability to place smelters near the mines, as Douglas suggested to the partners at Phelps, Dodge.

Smelting alone has never been able to create copper pure enough for most manufacturing demands, and a further step beyond smelting, known as refining, has been necessary.

Quite simply, copper smelting requires two basic elements: a way of melting the ore and a container that can handle that much heat. The furnace which would accomplish this was the "water jacket"—a crucible surrounded by a continuous flow of water for cooling.

The Bessemer process, pioneered for the steel industry offered an opportunity for copper smelting. For the Bisbee mines, which had

begun reaching sulfide ores in the early 1890s, James Douglas traveled to Europe to investigate a variation of the Bessemer process that was being used at Leghorn, Germany. Using this technology, he replaced a 36-inch water jacket furnace with a Bessemer plant that measured 120x42 inches and with it was able to more than double production in the mine to 1 million pounds of copper a month.

It would be another kind of copper mine that would endure and drive a different demand for smelting and benefit from advances in smelting. Once the 20<sup>th</sup> century rolled around, the large-volume, low-grade porphyry mine, such as Bingham Canyon in Utah and Morenci and Ray in Arizona, would provide the future of copper, directing the evolution of copper smelting as well.

Direct-feed ores ran from 5 percent copper and up (in the early days of a bonanza district they were often 20-40 percent copper.) But porphyry ores were less than 3 percent, typically, and couldn't be smelted profitably. Ore was ground up and "concentrated." Removing much of the waste leaving a concentrate that was as much as 40 percent copper.

This higher-grade finely ground material could take advantage of a new type of smelting furnace, known as a reverberatory, or reverb. There were basically large rooms that were lined with bricks that could endure 2,000-degree heat for many months. They could be



charged with large amounts of concentrates in batches that smelted in hours instead of days. Then a batch of matte from the first furnace sustained a "blow" of air and virtually all the rest of the impurities were released.

A weakness of this design is the sulfur is removed in this process and it is difficult to capture the emissions coming from the converter. The almost-pure copper is poured into another furnace, the anode furnace, for final purification. In this furnace, carbon is introduced to remove some of the remaining oxygen to combine with the sulfur.

Finally, the copper has to be cast into a form that can be transported. These forms have had many names including ingots and anodes. Anodes is the term used today. After leaving the smelter, the copper will go to an electrolytic refinery, where it will be suspended in a high-voltage charge that is applied through the circuit, with the copper serving as the anode and a sheet of pure copper or stainless steel serving as the cathode. The copper that plates out on the cathode is 99.999 percent pure.

In the typical ore body, the part near the surface tended to be oxide, since water percolating through the ore brought oxygen and turned sulfides into oxides.

These oxides, when smelted put out oxygen and carbon dioxide as off gasses. Deeper ores, however, are sulfides and give off sulfur dioxide

in the smelting process. When it mixes with water, that forms sulfuric acid, whether in lungs, on crops or in a device designed to make acid.

Though the idea of controlling sulfur dioxide emissions had been around for years, it got its first significant implementation in Finland in 1949, when Outokumpu pioneered its flash furnace. The Outokumpu process has been taken a step further at Kennecott Utah Copper. There, not only are the concentrates flashed in the first process, but the standard converter has been superseded by a flush converter, developed jointly by Outokumpu and Kennecott. The control of the gases also allows for a capture of 99.9 percent of the sulfur, rather than 90-95 percent in other applications that use an open converter with a hood.

Other uses for smelters are the growing demand for recycling of scrap copper. Also there is a growing amount of "cement" copper being produced through leaching the replacement of iron by copper, and this material too, could easily be recovered in a reverberatory furnace. They are a perfect way to dispose of large quantities of illegal drugs and offers a way to destroy medical waste. Today, copper smelters are enjoying a small boom as a tool for recycling electronic components because the process is designed to recover trace amounts of precious metals.

## Some Nevada Advertising History

By J.L. Foutz, The Polished Slab  
August 2003

In the forties and fifties, before television became the advertising medium of choice, roadside billboards were common. A shaving cream manufacturer called Burma Shave became a household name with clever sayings sectioned into four or five signs like "A man name Frank...lit a match...to check his tank...that's how we got...the skinless frank."

A casino in Reno, Nevada, used extensive advertising all over the United States to lure customers. Borrowing the "Pikes Peak or Bust" slogan, the Harold's Club erected "Harold's Club or bust" signs along every major highway in the United States.

In addition to the signs, the Harold's Club hired the Thomas C. Wilson Advertising Agency of Reno to research and create newspaper ads that included short glimpses into Nevada and Western history. These advertisements were published once a week during the 40s and 50s in every legal daily and weekly newspaper in Nevada. The following is text from one of these well-written advertisements.

### She Burns Green, Rosie!

Skirting the eastern rim of Death Valley, the Funeral range is as foreboding as its name, and the fact that these peaks look across a sullen desert toward Specter mountain and

the Skull range further east, does little to encourage the spirit of adventure in timid souls.

But Aaron Winters and his frail, Spanish-American wife, Rosie, ventured into this ghostly country in the late seventies and settled in Ash Meadows. A hillside dugout near a tiny trickling spring was their home site and they eked out a bare living from the unyielding desert. Often their fare consisted of mesquite beans and chuckwalla meat, primitive food of the Indians. Despite the rigorous life, Rosie maintained a link with civilization. An old starch box, used for a dressing table, supported a cherished collection of bottles that had once contained such feminine niceties as Magnolia balm and Florida water.

Despite the knowledge that his wife longed to leave the desert, Aaron Winters couldn't bring himself to quit his prospecting and settle down

to city life. Deep in his mind was the thought that somewhere in this barren country untold riches were waiting just beyond his grasp.

One night in 1880 a lone prospector wandered upon the Winters' Ash Meadows abode. As customary on the desert, the Winters asked the prospector to share their meager evening meal, and after supper the wanderer began telling of the Borax discoveries further north around Columbus.

Listening intently, Winters asked numerous questions concerning the tests that would prove that presence of borax deposits. In detail, the visitor enumerated the ingredients which, when mixed with borax and fired with alcohol, would produce a green flame.

No sooner had the prospector departed than Aaron Winters took off on a long trek to San Bernardino to obtain the chemicals. Upon his

return, he and Rosie traveled by foot over the Funeral range in to Death Valley where Aaron suspected the existence of borax. Making camp late in the evening at Furnace Creek, they scooped out a borax sample and mixed the powdered chemicals.

In the eerie desert darkness, streaked only by the pale light of the moon, Aaron fired the sample. Breathlessly they waited, then shouted, "She burns green, Rosie, we're rich!"

The test was accurate. Within a short time the properties he located were sold to William T. Coleman and Company for twenty thousand dollars, and Coleman started Harmony Borax Works on the floor of Death Valley. It was this property, the result of Aaron Winter's green flame, that later obtained prominence through twenty mule team transportation.

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## ***Contra Costa Mineral & Gem Society ANNUAL PICNIC***

By **Betty Pankey**, Hospitality Chair

**LOCATION:** Baldwin Park at 2727 Parkside Cir. in Concord, across from the Concord Senior Center. Watch for orange paper plates and orange streamers.

**DATE:** Sunday, September 14, 2003

**TIME:** 11:30 a.m. to ?? We will eat at 12:30.

The club picnic is this month, please come and join us. This is a great time to meet other club members and socialize. All that is required are your eating utensils, lawn chairs, a potluck dish to share with others and a few prizes for rock bingo. For new members that have never played rock bingo, anyone that plays needs to bring a few items for prizes, they don't have to be rock related, just something that you would like to receive for a prize. The club will furnish the drinks.

A good time to arrive would be 11:30 am. We plan on eating at 12:30 pm. There is a signup sheet that will be at the meeting, if you can't make the meeting, please call me at 439-7509.

Hope to see all of you at our picnic for a fun filled afternoon. Family and guests are welcome.



## Field Trip Calendar

By Dick Pankey, Field Trip Chair

- Aug.30-Sept.1 **Cedarville, CA** for petrified wood and fossilized leaves. Hosted by Fossils For Fun. Contact **Debbie Bunn**, 916-929-6665 or [fossilsff@aol.com](mailto:fossilsff@aol.com).
- Sept. 20 **Black Butte Reservoir**, west of Orland CA for jasper. Hosted by Sutter Buttes G&MS. Contact **Bob Berg** at 530-633-4612
- Sept.20-21 **Kennedy Mine, Jackson, CA.** Rock Swap, pot luck dinner and pancake breakfast. Hosted by Fossils For Fun. Contact **Dan Brown** at 209-296-6466 or [danbrown@volcano.net](mailto:danbrown@volcano.net)
- Oct. 8-12 **Moab, Floy Wash & Green River areas of Utah.** To collect Moab agate, petrified wood, fossils, barite balls, and more. Hosted by Fossils For Fun. Contact **Debbie Bunn**, 916-929-6665 or [fossilsff@aol.com](mailto:fossilsff@aol.com).

More information, fliers and details available from **Dick Pankey** at the meetings or call 439-7509 or e-mail me at [dickpankey@juno.com](mailto:dickpankey@juno.com).

### *Field Trip Chairman's Report*

## ***Keno Rock Swaps***

**Betty and I** got a late start on Thursday and didn't get to the campgrounds at Keno until 7:30. Most of the other tailgaters were already there and set up. We got a good spot among the tall pines and set up our trailer. We set up an Old Timers' table and Betty put out some of her stained glass sun catcher for sale. This was our first trip to Keno and our first opportunity to attend a YOTMC event in Oregon. The turn out of tailgaters and buyers was less than previous years but still a fun event. They had a potluck dinner Saturday evening followed by 5 or 6 silent auctions. They had nice auction items that went for very low bids. Sunday morning was the Old Timers' breakfast – all you could eat pancakes, scrambled eggs, ham, juice and coffee, prepared and served al fresco.

Most of the tailgaters packed up and left around noon and so did we. We drove east to Lakeview, OR. and spent the night at the fairgrounds. This was a good place to get a hot shower and fill up our water tank before heading to the Lassen Creek campgrounds for a few days. We spent 3 nights, parked next to the creek. In the mornings we visited the various obsidian-collecting areas. In the afternoons we relaxed in the shade and sat and waded in the creek. Our oldest dog, Cadi, loves water. She would swim awhile then roll in the dirt: then back in for another swim. The water was about 80° that felt good with afternoon temperatures in the high 90's.

We didn't collect much this trip. I spent my time exploring the areas around the obsidian dig sites. Didn't find anything exciting, but Cadi and I had some nice hikes.

## ***Antioch Lapidary Club Rock Swaps***

After a hiatus of several years the Antioch Lapidary Club held a Rock Swap and BBQ on Saturday, August 9<sup>th</sup>. It was a short notice affair but there was a good turnout and it was a lot of fun. There were 5 tailgaters including **3 from CCM&GS - Donal Tompkins, Al Schleif, and Betty and I**. There was a good turnout of members from our club to support this event. Their museum and workshop were also open. At 12:30 they rang the dinner bell for the BBQ – hamburgers hot off the grill with all of the fixings, baked beans, potato salad, chips, pop, and cookies and pie for dessert. Things slowed down after lunch and we all closed up shop by 3:00. They are already talking about next year and I am sure it will be bigger and better. If you missed it this year plan to attend next year. Great Fun!

Don't forget the rock swap is in Jackson, CA. **Fossils For fun will hold their 3<sup>rd</sup> annual Tailgate Gemboree at the Kennedy Mine, September 20-21**. This is a two-day swap. Swap space including camping is \$30. There is a potluck dinner and auction on Saturday evening and a pancake breakfast on Sunday morning. Betty and I plan to be at this rock swap again this year.

## **Utah in October**

**In October we are off to Blanding, UT where I will attend another of Walt Wright's Petrified Wood Seminar**. After the seminar Walt will take us to several petrified wood collecting sites around the area. This is an opportunity we couldn't pass up. We will then go to Moab to join up with the **Fossils For Fun field trips in and around Moab**. If anyone is interested in either of these trips, contact me for details.

# Contra Costa Mineral & Gem Society

P.O. Box 4667, Walnut Creek, CA 94596

General Meeting: 2<sup>nd</sup> Friday of the month at 7:30 pm

First Presbyterian Church, 1965 Colfax Street, downtown Concord  
(corner of Salvio and Colfax)

Free parking at the City of Concord garage located across Salvio  
Membership fees: Initiation \$5; Regular member \$10; Associate \$5; Junior \$1.

Visitors are welcome! Bring a Friend

## Board & Committee Members – 2003

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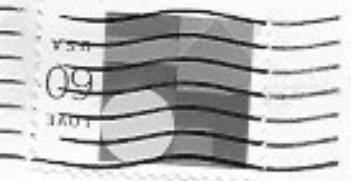
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Time Value

Save Stamps  
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# "DIABLO DIGGINS"

Official Bulletin & Meeting Notice

## Contra Costa Mineral & Gem Society

A Non-Profit Organization Whose Members Enjoy  
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