

WHITTIER

ROCKHOUNDER
GEM & MINERAL
SOCIETY

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**March 25th Program:
Rocks Found along the Lewis and Clark Trail**

Gem of a beetle which thinks it's an opal



Pachyrhynchus argus . . . layers of transparent spheres packed in a precise hexagonal pattern in this beetle emulate that of the opal. (See article page 6 & 7)

ROCKHOUNDER

THE PREZ SEZ:

It's hard to believe we have already reached March. The year seems to be flying by. For those of you who were unable to attend, our second meeting in our new location was much less “cozy” than our first was. I am still looking forward to seeing a lot of new and returning faces come out and join us at the meetings. Please invite some guests and try to bring a friend along who may not have been in to a meeting in a while.

After a recent outing with Jay, I realized the importance of safety on our fieldtrips, both official and unofficial. Fortunately I remembered one of the most important safety tips, don't go out alone! I forgot another important tip however, Stay Hydrated. I know we are all intelligent individuals but it doesn't hurt to get a reminder now and then. On that note, I am asking everyone to submit some of your safety tips and tricks and I'll ask Jay to publish a collection of some of them in upcoming issues of The Rockhounder.

Since I am being brief this month, I want to take a moment to thank Jay Valle for his tireless efforts to publish the Rockhounder every month. You probably don't know the effort involved in compiling the information and getting the various chairpersons and presidents to submit their columns (a truly grueling task). Let's all take a moment the next time you see Jay to thank him for doing such a terrific job and keeping us all up to date.

Hope to see you all at the meeting

James

**WGMS General Meeting
March 25 at 7:30 PM**

NEW LOCATION!!!
Whittier Community Center
7630 Washington Ave. Whittier
(see map on page 15)

PROGRAM:

"Rocks Found along the Lewis and Clark Trail"

As many of you know, **Bill and Isabella Burns** were involved in an AFMS project to produce a guide book of interest to rockhounds that would show locations of geologic formations, American Indian references, fossils, etc. that Lewis & Clark saw or would have seen during their famous "tour" across the American Frontier. **Bill & Izzie** participated in the festivities surrounding the 200th Anniversary of the historic trip and have followed much of the Lewis & Clark Trail themselves, though probably in a more comfortable fashion. They met many famous people and did many famous things along the way. Because of their involvement with the project, they accumulated a great deal of material on this subject and would like to share it with us at the March 25 General Meeting.

LAST CHANCE FOR DUES

It is DUES time again and the WGMS needs you. Your continued support allows us to produce this newsletter and helps provide the meeting location. Thanks to all of you who have already sent in your check. The March General Meeting is the last chance to be counted on the 2004 Membership List.

Single adult	\$15.00
Married Couple	\$25.00
Junior Member	\$5.00

Please send your dues to the Treasurer, Jay Valle at:

Jay Valle
1421 Latchford Avenue
Hacienda Heights, CA 91745

WGMS News

A work party has been scheduled at the **Ragazzi's** warehouse for April 2 at 10 AM. We will be setting up shelves for the WGMS show cases and other stored items. **We can use all the help we can get!**

The following Club tasks have been completed: The equipment at the Boys & Girls Club has been removed for repair/refurbishment; the last of the rough rock has been moved from Mary Rose Merten's house; and the Club library has been sent to the librarian for inventory and sorting.

Good Old Days?

Beat up old tires tossed here and there, an occasional junk car, used motor oil to be rid of, exhaust fumes fouling the air. Bring back those good old days of horses and buggies!

Being a history buff who recalls when horses and buggies were a common sight in Los Angeles, I shudder to think of today's transport needs being met by faithful horses. Speed and feed costs aside, let's return to 1875 and the City of London. Pollution there in the way of 1,000 tons of horse manure gathered daily. By the late 1800's, American cities with populations of 12,000 horses had to daily remove 130 tons of waste from their streets. New York City, by 1900, had 12,000 horses and its citizens fought a daily battle removing some 260,000 pounds of droppings. Good fertilizer? To a point, yes. However, only so much can be utilized in areas and eventually hauling further and further away would cease being profitable... yet it had to be properly disposed of.

Manure on the street bred billions of flies which carried some 30 diseases, and then horses themselves had diseases, *glanders*, for example, communicable to humans. Other fumes besides manure filled our early city life. Urine from horses couldn't be collected, adding to the filth and stench and on paved or stoned streets caused many to become dangerously slippery. Chicago and New York records show in 1900, up to 15,000 horses a year, in each city, died. About 416 dead horses per city to dispose of each day. Where? Our city forefathers in the first part of this century found transportation costly and fraught with riddles. The automobile became their only hope to escape from the mounting horse problems. Bring back those good old days? Think about it...

From John M. Swisher's book, "Bits 'N Pieces of the Mohahve Desert's Weathered Past."

**Meet a future jewel of technology:
Gem of a beetle which thinks it's an opal**

**By Deborah Smith, Science Reporter, Sydney Morning Herald
December 18, 2003**

This Australian beetle really is a gem: the greenish scales on its back are identical to opal (see picture on cover).

Andrew Parker, a former researcher at the Australian Museum, was amazed when he examined the internal structure of the scales under a powerful microscope and realized it was the same as that of the precious stone.

"This is the first time opal has been found in animals," said Dr Parker, who is now at Oxford University in Britain.

The find could lead to a new method for synthesizing opals, not only for use in jewellery, but as components, known as photonic crystals, for the computers of the future, which will rely on the movement of light.

The beetle, *Pachyrhynchus argus*, is commonly found in the rainforests of north-eastern Queensland. Its particular pattern of patches of metallic gleam had probably evolved to make it recognisable to other members of its species in the dim light under the forest canopy, Dr Parker said. "The optical effect created by this weevil makes it appear strongly coloured, whatever angle you look at it."

The discovery is published today (December 18, 2003) in the journal *Nature*.

The colour of most opals, and the beetle's scales, is the result of light being reflected from layers of transparent spheres, packed in a precise hexagonal pattern.

The beetle reflects only one colour because all of its nano-spheres are exactly the same size - about 250 nanometres across (a nanometre is a billionth of a metre) - whereas multi-coloured opals have a range of different sized nano-spheres.

Dr Parker said that although liquid opals were easy to make, synthesising solid ones was notoriously difficult. His team has begun to try to fathom how

the beetle creates an opal-like structure using the chemical "factories" inside its cells.

"If we can emulate the weevil's means of opal production this would represent a technological breakthrough, particularly since opal, as a photonic crystal, has numerous industrial applications," he said.

Scientists have already had some success copying nature, recently creating artificial mother of pearl by mimicking the way abalones build up nano-layers of different materials to make their shells.

But the beetle's method for making perfect opals posed a bigger challenge than this, because it probably used clever pieces of tiny machinery, such as molecular motors, and templates to extrude the nano-spheres, Dr Parker said.

From <http://www.smh.com.au> via Opal Express 01/04

Rock and Equipment for Sale

Club Members,

Lapidary has been my hobby for over 40 years and my part time business since I retired 10 years ago.

We are moving into a senior mobile home park soon so have to sell all rocks and equipment. There are over a hundred types of slabs and tons of rough rock plus lots of equipment as well as finished jewelry, specimens and cabs.

All must go at "rock bottom" prices within the next 2 months.

Give me a call at **760-726-9656** or **760-726-9123** to make arrangements for you and your fellow Club members to come and see what I have for sale.

Thank you.

Jim and Doris Hoyle
936 Chumash Trail
Vista, CA 92084

**Lavic Siding Fieldtrip
March 20th & 21st, 2004**

Wouldn't be nice to go to a place where you could camp and collect in the same spot? Well that place is Lavic Siding off the I-40. After a good night's sleep you step out of your tent or RV with a cup of coffee in hand and you wonder where you'll go to do some collecting. It's then you realize that all you really need to do is bend over and pick up the very stone you're there to collect. That's right the stone is jasper, it comes in green, red, orange, various shades of brown and yellow. Some are mixes of these colors and others have agate "windows" with flecks of color in them.

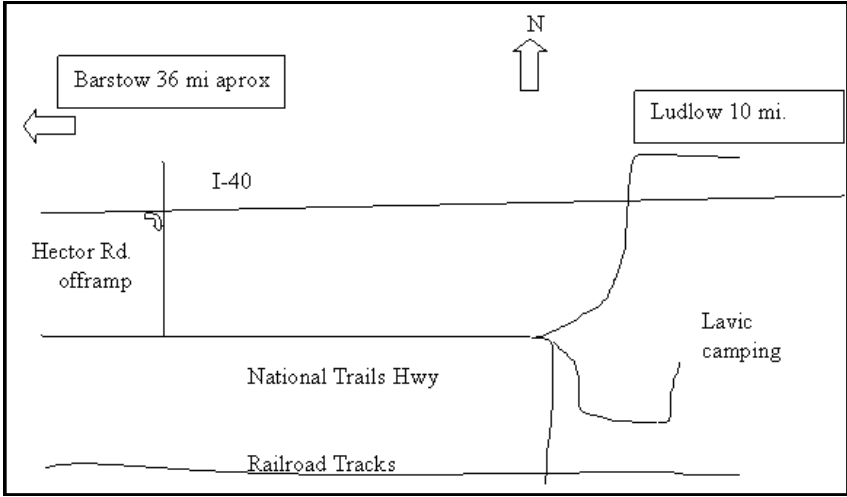
You'll have this chance on this fieldtrip! Now you may think you're limited to this one area, well this isn't true at all. If you go up the road where you had driven down the day before and check the washes that run north to south, you'll probably find larger pieces of jasper.

Also, not far away is an abandoned gold/copper mine (Baghdad-Chase) where you may find malachite or azurite. There is a large area to explore. On the way there you'll see a headframe from another gold mine and you might find where the town had been (fire up the metal detector) and wander around almost hearing the hustle of that forgotten town.

This is a good trip for the first timer or the veteran rockhound; there is lots of stuff to collect. On Saturday evening we will have a potluck dinner at 4:30 PM. Typically we will be leaving camp around 8:00 AM.

Hope to see you there!

Somewhere in California going the wrong way
Joe Goetz



By the way...

The February Oceanview mine field trip was postponed due to rain and will be re-scheduled for April 18th or 25th. Please let me know if you are going to attend.

Thanks!

2004 Fieldtrip schedule

- March 20-21** Lavic Siding
- March 22-26** Extended trip with Vern & Sylvia to Burro Creek
- March 27-28** The Cottonwood, Arizona Show
- April (to be announced)**.. Local day trips
- May 29-31** Broadwell Dry Lake
- Jun through Aug.** No trips
- Sept. 25-26** Paul Bunyon
- Oct. 23-24** Whittier Club Claim
- Nov. 25-28**..... Death Valley area not in Death Valley.

CFMS 2004 Show Coming Up Fast!
May 28 - 30, 2004

This year's CFMS Show is almost here (see facing page) and we have been invited to participate.

If you want to enter a case for competition or display only, Bill & Izzy Burns will have the forms at the next general meeting. You can also download the appropriate forms from the CFMS web page at:

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

If you already know that you don't want to miss this, it is not too early to start making your plans. Camp sites can fill up fast, as can motels. The CFMS web page has a list of Hotels/Motels, Bed & Breakfasts and Campgrounds you can use as a guide (I will bring a copy to the March meeting, as well.)

JValle

Come to the
CFMS & Mariposa Mineral & Gem Show

Goldbug  **Gala**

May 28-30, 2004

At the
Mariposa County Fairgrounds
1 hour from Yosemite National Park

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For Information or a Dealer's Packet, contact
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(209) 742-7625 Fax (209) 966-3597 Email: mineralmuseum@stl.net

**CFMS & Mariposa Mineral and Gem Show
Goldbug Gala
May 28 - 30, 2004
Mariposa County Fairgrounds**

Dear Friend,

The Mariposa Gem and Mineral Club, the California State Mining and Mineral Museum - a California State Park, and the California State Mining and Mineral Museum Association cordially invite you to join us May 28th, 29th, and 30th, 2004, as we host the 65th Annual California Federation of Mineralogical Societies Gem and Mineral Show at the Mariposa County Fairgrounds, 2 miles south of Mariposa, California, on Highway 49.

We have chosen the theme, "Goldbug Gala," to celebrate Mariposa's name (Spanish for butterfly!) and Gold Rush heritage. The show's exciting activities and exhibits will be located in and around the California State Mining and Mineral Museum, providing you with the opportunity to see the state mineral collection while attending the show.

If you find time to tear yourself away from the show, there are many sites to see in the Mariposa area. Mariposa is located at the southern end of the Mother Lode, and Yosemite National Park is our backyard. Mariposa offers something for everyone: historic Gold Rush towns, outdoor recreation, stunning scenery, wineries, shopping, golf, and restaurants. Mariposa is also celebrating the 150th birthday of its historic Courthouse in May 2004. There will also be opportunities to sign up for collecting fieldtrips to some of our favorite localities.

Come early or stay an extra day or two. We're looking forward to seeing you. Sincerely,

Peggy Ronning
Show Chairman

Facts to Know

Show theme: "Goldbug Gala"

Admission: \$4.00 for adults. Children under 17 free.

Show hours: Friday, May 28th & Saturday, May 29th: 10:00am - 6:00pm

Sunday, May 30th: 10:00am - 4:00pm

The Bola Tie Revisited

The bola (not bolo) tie though known in much of the world is most prevalent in the Southwestern U.S. There are many stories as to the origin of the bola tie, but the one that is normally accepted started in 1949 with Victor E. Cedarstaff of Wickenburg, Arizona.

Cedarstaff was riding horseback when the wind blew his hat off; the band had come loose. Instead of putting it back on the hat, he put the band around his neck. A friend saw this and remarked, Nice tie you're wearing!

That gave Vic an idea. He was a silversmith and had taught leather craft, so he made a tie from leather lacings and attached silver balls at the ends. Then he made a silver slide with a piece of turquoise on it and slipped it on the lacings. This attracted attention and he began to get orders to make them. He was unable to get a patent on the tie because such a slide arrangement was already in existence.

One problem was to make the slide so it would slip but not damage the leather. Eventually, he designed a yoke which held the leather properly and eliminated the necessity of having to slip the tie over the head. Now he had something new and on this modification he was issued a patent.

He needed a name for the tie which would help popularize it and first called it a Piggin Necklet after the piggin string that cowboys used. Sometime later, a friend who had been to Argentina showed Vic a device he had brought back called a bola. This was used in Argentina for catching cattle and it reminded Vic of what he had made. The initial name never caught on and Vic decided to call his tie a bola. It is now the official neckwear of Arizona.

Original source unknown via Breccia 6/98, via The Nugget 9/01

Words of Wisdom

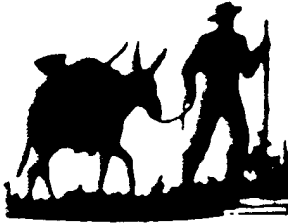
- A bus station is where a bus stops. A train station is where a train stops. On my desk, I have a work station.
- If Fed Ex and UPS were to merge, would they call it Fed Up?
- If Quitters never win and winners never quit, what fool came up with, "Quit while you're ahead"?
- What hair color do they put on the driver's licenses of bald men?
- How much deeper would oceans be if sponges didn't live there?

Gem Carvers Guild of America 4/99

Upcoming CFMS Gem Shows

- Mar 13-14 San Marino, CA. Pasadena Lapidary Society**
San Marino Masonic Center, 3130 Huntington Dr.
Hours: Sat. 10 - 6; Sun. 10 - 5
- Mar 20-21 San Diego, CA. San Diego Mineral & Gem Society**
Al Bahr Shrine Center, 5440 Kearny Mesa Road
Hours: Sat. 9:30-5; Sun. 10-4
- Apr 3-4 Torrance, CA. South Bay Lap & Mineral Society**
Torrance Recreational Center, 3341 Torrance Blvd.
Hours: 10-5 both days
- Apr 24-25 Hacienda Heights, CA. Puente Hills Gem & Mineral Club**
Steinmetz County Park, 1545 S. Stimson Ave.
Hours: 10 - 5 both days
- Apr 24-25 Lancaster, CA. Antelope Valley Gem & Mineral Club**
Antelope Valley Fairgrounds, 2551 W. Avenue H
Hours: 9 - 5 both days
- May 1-2 Anaheim, CA. Searchers Gem & Mineral Society**
Brookhurst Community Center, 2271 W. Crescent Ave.
Hours: Sat 10 - 5 Sun. 10 - 4:30
- May 1-2 Bakersfield, CA. Kern County Mineral Society**
Kern County Fairgrounds, Ming Ave. & P Street
Hours: 10 - 5 both days
- May 1-2 Bishop, CA. Eastern Sierra Gem & Mineral Club**
Tri County Fairgrounds, Sierra Street & Fair Drive
Hours: Sat. 9 - 5; Sun. 10 - 4
- May 15-16 Conejo, CA. Conejo Gem & Mineral Club**
Borchard Park Community Center, 190 Reino Road
Hours: Sat. 9 - 5; Sun. 10 -5
- May 15-16 Yucaipa, CA. Yucaipa Valley Gem & Mineral Society**
Yucaipa Community Center, 34900 Oak Glen Rd.
Hours: 10 – 5 both days

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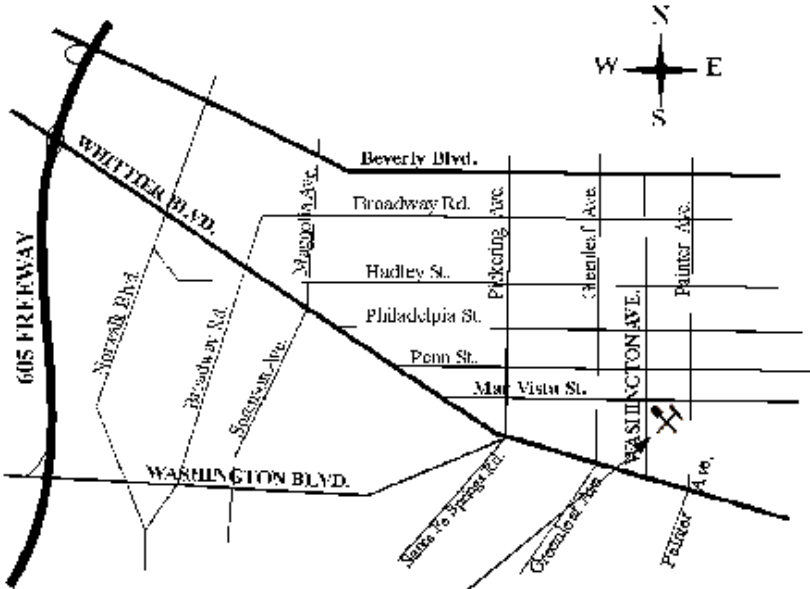
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NEW MEETING LOCATION!
Whittier Community Center
7630 Washington Ave. Whittier



MAR VISTA & WASHINGTON AVE.  WHITTIER COMMUNITY CENTER

Editor: Jay Valle, 1421 Latchford Avenue, Hacienda Heights, CA 91745
Home: (626) 934-9764; E-Mail: jvalle@aqmd.gov
Bulletin exchanges are welcome and should be sent to the editor.

Affiliations



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American Federation of Mineralogical Societies
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Meeting Date: March 25, 2004 at 7:30 PM
Location: Whittier Community Center
(see page 15 for map)