

NOC GEM & MINERAL SOCIETY NEWS

Vol, 28 No. 11

December 2009

President's Message

by Don Warthen

A Cheerful Merry Christmas and Happy New Year! Can you believe the end of the year is here and I'm just getting started on last years' resolutions. A recap of this years accomplishments:

First, we have had a great and tumultuous year with the undertaking of the 2010 Federation, CFSM Show. But, all in all, we have had some of the best classes in wire wrap and earth science this year. The kid's classes at the Brea Elementary School were fantastic and most educational. The teachers and children all wrote to our NOC teachers, Don Eschbach and Dave Swanston letters of appreciation

The Field trips were resumed this year with some really interesting locations led by our field trip chairman, Jay Valle. The monthly meetings were most educational and entertaining made possible with program chairman, Mike Beaumont getting fantastic speakers. They were simply great.

We had a terrific yard sale (we didn't make much money but we had a great time), and the Senor Compos mixer this year was one to remember. The NOC had the most attendees of any group (we came in second with the tips) and we all had a fun time.

Our chamber breakfast was the best of any organization this year and everyone remembers our Friday Night Mixer before the show. Our show this year was bigger and better then ever before. The city was truly excited about this years show.

All this was possible because of you, the members of the North Orange County Gem and Mineral Society. This is one of the most successful clubs in the CFMS and a club like this cannot be a winner without the members pulling together, and the president cannot function without the support of each and every one of you. I want to thank each and every member for all the hard work and support you have given me and I look forward to have the same teamwork for next year's big show.

I am looking forward to see everyone at the banquet on December 8th. Yolanda Schirer has put together a fanatic program this year and I think everyone will really enjoy and have a great time. Please remember to bring non-perishables food, like can goods and toys for all the families in La Habra that are not so fortunate.

Merry Christmas
Don

NOC Club Activities

Board Meeting — To be announced
Deadline for NOC News — Dec. 17.
Awards Banquet — Dec. 8

Awards Banquet

by Yolanda Schirer

Date: December 8
Time: 6::00 to 10:00p.m.
Dinner will be served at 7:00pm.
Place: DeLuca's Restaurant
Location: 6503 E Whittier Blvd.,
Whiiter CA 90603.

Members in the News

HAPPY BIRTHDAY and have a wonderful day all of you who were born in Decemberber.

*Janie Arp
Pat Mogan
Jerry Turner
KathyValle*

*Wendy Erskine
Charles O'Neil
Kathleen Turner*

Your gemstone is Turquoise
Your flower is Holly or Narcissus

Refreshments

by Kathy Valle

Thanks to Marilyn Kline & Randi Hetrick for bringing the goodies to the November meeting.

Shows and Events

December 5-6 2009, Barstow CA

Mojave Gem & Mineral Society
Community Center
842 Barstow Road
Hours: 10- 5 both days
Gene Hains (760) 256-0595
Email: janetwentz@earthlink.net
Website: mdgms.org

March 6-7 2010, Arcadia, CA

Monrovia Rockhounds, Inc.
Los Angeles Co. Arboretum & Botanic Gardens
301 Baldwin Ave.
Hours: Sat. & Sun. 9-4:30
Jo Anna Ritchey (626) 359-1624
Email: vgms_editor@roadrunner.com
Website: www.Moroks.com

November 2010, Lancaster, CA

Palmdale Gem & Mineral Society
Antelope Valley Fairgrounds
2551 West Ave. H & Hwy 14
Hours: 9-5 daily
Susan Chaisson-Walblom (661) 943-1861
Email: sichaisson@yahoo.com
Website: palmdalegemandmineral.com

June 18-20 2010, Whittier, CA

AFMS/CFMS Show and Convention
Hosted by North Orange County Gem & Mineral Society
So. CA University of Health Sciences Campus
16200 E. Amber Valley Rd., Whittier CA
Hours: 1-5 daily
Mike Beaumont (714) 510-6037
Website: networkingWave.com -
Click on AFMS2010
Website: www.nocgms.com
Website: www.amfed.org

Quartzite Dates

Jan 1 - Feb 28 — Desert Gardens - Gem & Mineral Show

Jan 9 - Feb 24 — Main Event

Jan 1 - Jan 10 — Tyson Wells Rock & Gem Show

Jan 15 - Jan 24 — Tyson Wells Sell-A-Rama

Jan 29 - Feb 7 — Tyson Wells Arts & Craft Fair

Jan 16 - Jan 24 — Sports, Vacation & RV Show

Jan 27 - Jan 31 — Hobby Craft & Gem Show

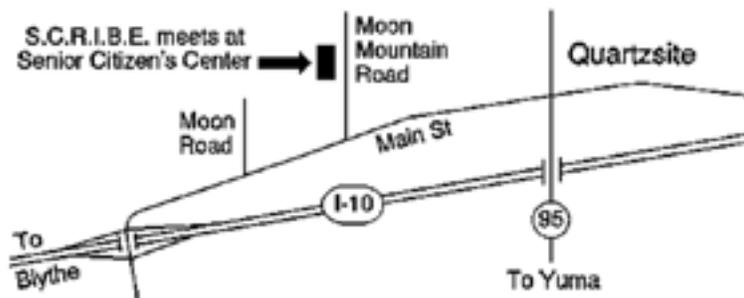
Jan 20 - Jan 24 — Annual Pow Wow

Jan 30 - Jan 31 — Rock & Roll Car Show



Announcing the Upcoming 29th Annual SCRIBE Meeting and Editor's Get-Together

Saturday, 23 January 2010 (9:00 am MST)
Senior Citizen's Center
Moon Mountain Road
Quartzsite, Arizona



December Birthstone Turquoise

by *Ofelia Warthen*
Ref: *GIA & Don Warthen*

Turquoise is an opaque, blue-to-green mineral that is a hydrous phosphate of copper and aluminium. It is rare and valuable in finer grades and has been prized as a gem and ornamental stone for thousands of years owing to its unique hue. In recent times turquoise, like most other opaque gems, has been devalued by the introduction of treatments, imitations, and synthetics onto the market.

The substance has been known by many names, but the word *turquoise* was derived around the 16th century from the French language either from the word for *Turkish* (*Turquois*) or *dark-blue stone* (*pierre turquin*). This may have arisen from a misconception: turquoise does not occur in Turkey but was traded at Turkish bazaars to Venetian merchants who brought it to Europe.

Even the finest of turquoise is fracturable, reaching a maximum hardness of just under 6, or slightly more than window glass. Characteristically a cryptocrystalline mineral, turquoise almost never forms single crystals and all of its properties are highly variable. Its crystal system is proven to be triclinic via X-ray diffraction testing. With lower hardness comes lower specific gravity (2.60–2.90) and greater porosity: These properties are dependent on grain size. The lustre of turquoise is typically waxy to subvitreous, and transparency is usually opaque, but may be semitranslucent in thin sections. Colour is as variable as the mineral's other properties, ranging from white to a powder blue to a sky blue, and from a blue-green to a yellowish green. The blue is attributed to idiochromatic copper while the green may be the result of either iron impurities (replacing aluminium) or dehydration.

The refractive index of turquoise is approximately 1.61 or 1.62; this is a mean value seen as a single reading on a gemmological refractometer, owing to the almost invariably polycrystalline nature of turquoise. Under longwave ultraviolet light, turquoise may occasionally fluoresce green, yellow or bright blue; it is inert under shortwave ultraviolet and X-rays.

Turquoise is insoluble in all but heated hydrochloric acid. Its streak is a pale bluish white and its fracture is conchoidal, leaving a waxy lustre. Despite its low hardness relative to other gems, turquoise takes a good polish. Turquoise may also be peppered with flecks of pyrite or interspersed with dark, spidery limonite veining.

Turquoise was among the first gems to be mined, and while many historic sites have been depleted, some are still worked to this day. These are all small-scale, often seasonal operations, owing to the limited scope and remoteness of the deposits. Most are worked by hand with little or no mechanization. However, turquoise is often recovered as a byproduct of large-scale copper

Education Report

Submitted by Ofelia Warthen, chairman

We have ended our 2009 classes in an up-swing and enthusiastic mode. The Education Committee members have expanded the knowledge in earth sciences to its members of NOC and the outside public. I have only accolades for all their passion to teach with such patience.

I congratulate them as follows: Fran Swanston, Don Eschbach, Loretta Ogden, and Wendy Erskine. Our volunteer teachers were Dave Swanston and Mike Beaumont. What a great "Team"!

Our 2010 Committee will be meeting on December 10th to discuss next year's class schedule, fees etc. We look forward to having great classes for our members and public that will enhance our knowledge and continue to expand new future dependable teachers and bring in new members. Please call me with your input for future classes.

Maximize Your Talents

by Ofelia Warthen

1. Belief - lifts your talents
2. Passion - energizes your talents
3. Initiative - activates your talents
4. Focus - directs your talents
5. Preparation - positions your talents
6. Courage – tests your talents
7. Character – protects your talents
8. Relationships – influence your talents
9. Responsibility – Strengthen your talents
10. Teamwork – Multiplies your talents
11. Practice - sharpens your talents (author unknown)
12. Persistence - sustains your talents

LIFE IS A MATTER OF CHOICES AND EVERY CHOICE YOU MAKE, MAKES YOU! I WISH ALL OF YOU A VERY JOYOUS HOLIDAYS! LET US ALL MAKE GOOD CHOICES FOR NEXT YEAR! Ofelia Warthen

Nevada Mineral & Book Company

A UNIQUE EARTH SCIENCE BOOKSTORE & NATURAL HISTORY GALLERY GALLERY

342 S. Tustin Street
Orange, CA 92866

Store Hours:

10:30 a.m. - 6:00 p.m.
Monday thru Saturday

Dear Friends and Colleagues:

After 20 years in Nevada we have relocated to Orange County. We feature the largest selection of earth science publications (new, used & rare) in one location in North America; as well as minerals, fossils, meteorites, decorator items, and unique colored stone jewelry.

We hope you will visit our store when you are in Southern California. You may also call or e-mail your wants, or (while our website is being updated) search our on-line inventory of publications at <http://www.abebooks.com/bookseller/NEVADABOOKS>.

We currently have over 2,000 publications listed on-line, but over 100,000 in stock, so if you do not see what you are looking for on-line, please contact us directly.

More Than Just Books

In addition to having more than 100,000 earth science publications in stock, we have a large assortment of mineral & fossil specimens, meteorites, educational kits, decorator items and unique colored stone jewelry.

We cater to the interests of all who are interested in the earth sciences, whether they be novices, rockhounds, educators, or seasoned collectors and geologists/ researchers.

For more information, please contact us at:
minbooks@aol.com or
(714) 633-1549



AFMS News

The Inter-regional Rockhound Rendezvous for 2010 is scheduled for **Memorial Day weekend in Wyoming's Blue Forest**.

The dates to remember are **May 29-31**.

This is a well-known petrified wood collecting location with a large area to collect in. Some great material is found here every year and lots of room to dig. We will plan to dry camp in the collecting area, indulge in a potluck one evening, and follow that with a swap session.

CFMS News

Dec. 12-13 - N. Cady Mtns. Field Trip via Field Trips - South; Shep Koss & Adam Dean, primary contacts.

Jan. 1 - Member Club/Society Officer Change Form due to Pat LaRue.

Jan. 1 - Dues and Insurance due from all local societies. Send to Pat LaRue using forms distributed in packets at the Fall Directors Meeting.

Clubs not paying are considered delinquent as of March 1.

MyTrip to Zzyzx

by Nancy Bird

Every year the California Federation of Mineralogical Societies (CFMS) has 3 “rockhound retreats”. In the Fall, it’s to Zzyzx near Baker in SoCal and in the Spring, it’s to Camp Paradise near Marysville in NoCal for 2 one week sessions. Each place is very different and each has a few choices in classes that the other doesn’t.

The CFMS started using Zzyzx a little over 20 years ago. The buildings are used by the National Park Service and the Cal. State University system for desert studies with students coming from all over the world. Zzyzx sits on the banks of dry Soda Lake near Baker and is a bona fide oasis with vernal pools, endangered fish (chubs), ducks, and native Washingtonia Fan palms. And the usual desert critters.

There is space for about 80 people divided by married folks in their own rooms, RV’ers, and dorms for singles- and communal bathrooms for males & females. At \$350, your room, board (great food!), and all instruction is a fantastic bargain. Depending upon what you chose some supplies must be purchased at cost.

At Zzyzx, you can take a field trip every day, learn silversmithing, copper enameling, silver clay, wire-wrapping, soft stone carving, beading, and lapidary including intarsia. Way too many things to do in one week! The last day is show & tell where you get to see, all together, what everyone worked on.

Camp Paradise in 2010 will be May 16-22 and May 23-29. There are no field trips but it does include all of the above plus beginning faceting, ming-trees, lost wax & silver casting, lampwork bead making and Dichroic glass. The registration form is out now and 1st timers are given preference. You can get the forms on page 10 of this newsletter or on the cfmsinc.org website.

I went on 2 day long field trips, learned wire-wrapping, and made 2 necklace sets with materials I had brought from home but never seem to have the time to bead. And I met lots of new friends from all over the state who have the same interests as I. I would highly recommend going to either or both-it was wonderful!



Newfound L.A. Fault Threatens Major Quake

*via the National Geographic News, April 3, 2003
by Stefan Lovgen*

Between the sun and the stars, Los Angeles sometimes seems like paradise. But life in the City of Angels comes at a price: earthquakes.

Now the threat of “the big one” may be greater than previously feared. Researchers have identified a buried fault that may have caused at least four large-magnitude earthquakes in the past 11,000 years and is still active.

Known as the Puente Hills Blind Thrust System, the fault is three to 17 kilometers (2 to 11 miles) deep and extends for almost 50 kilometers (31 miles) from northern Orange County, through Los Angeles, up to Beverly Hills.

“In terms of location, it couldn’t be much worse,” said James Dolan, a professor at University of Southern California’s department of Earth sciences, who led the study. “Downtown L.A. is sitting on top of this thing.”

Paleoseismologists have previously pinpointed the locations, magnitudes, and dates of ancient earthquakes, but never in so-called blind thrust faults. These are faults that don’t extend to the surface of the Earth. Scientists have in fact debated if such faults exist beneath Los Angeles. The new study shows they both exist and could pose a credible earthquake hazard.

Earthquakes New and Old

The researchers received help for their study from an unexpected source: the oil industry. Companies like Texaco, which have spent millions of dollars on geologic drilling research in California, provided scientists with invaluable research data.

Using that information and high-resolution seismic reflection data, Dolan and colleagues drilled 15 bore holes, up to 40 meters (130 feet) deep, to study sediment layers overlying the hidden fault. What they found was subtle folding of the sediments revealing a history of ancient earthquakes.

The study shows the occurrence of at least four earthquakes with a magnitude of 7.2 to 7.5 on the Richter scale during the past 11,000 years. Perhaps most importantly, the 6.0-magnitude Whittier Narrows earthquake occurred in 1987 along a segment of Puente Hills, demonstrating that the fault system remains active and dangerous.

Squeezing L.A.

Geodetic studies show that Los Angeles is contracting. The northern point of the L.A. basin is moving closer to the southern point. “L.A. is being squeezed from north to south at about 4 to 5 millimeters [0.15-0.2 inch] per year,” said Dolan

This shortening, part of which is happening on top of recognized fault systems, literally bends the rock in the ground. The process stores energy, and when this energy exceeds the strength of the system, the fault breaks, triggering an earthquake.

A Petrified Wood Fact

*via the Tumble Rumble, 10/09
The Pegmatite, 10/01
(from Kiskigen Journal 1/97 via Shop Notes 9/01)*

Many pieces of petrified wood, especially from the northwest, have a center that looks like wood, but with a layer of chalcedony or pumice between the center and outside. This indicates that the tree was green when it was buried in hot ash. The water in the green wood evaporated, making the wood shrink. The outside was made into a cast by the heat, so the areas left between the wood and the cast were filled with chalcedony, making beautiful pieces of petrified wood.

Earth Science Studies Camp Paradise May 16-22, 2010 & 23-29 2010

by Marion F. Roberts
via CFMS Newsletter

As of this issue of the CFMS Newsletter and on the web site, you will find the application for Camp Paradise, which will consist of two weeks of programs for 2010.

For Week One, we will register on Sun. afternoon, May 16, 2010, with classes starting Monday, May 17 and ending Friday, May 21; then depart on Saturday, May 22.

Week Two starts with check-in on Sunday afternoon, May 23, and ends on Friday, May 28, with departure on Saturday, May 29.

Dinners will be served on Sunday evenings and a continental breakfast on Saturday mornings. For anyone staying for two weeks, meals can be had in the cafeteria for \$10.00 per person for the weekend between the two weeks.

I plan a work session for any RVers that can and want to come up any time between Wednesday, May 12 through May 14. No food or rooms will be available until Sunday night, though.

Because both Anna and I will be in Quartzsite the whole month of January, please send applications to arrive after February 1, 2010.

This will help us insure that there will not be any lost applications or checks.

- Marion

Editors Note: Application forms are also on page 10 of this newsletter.

Would You Like to Scratch a Diamond?

by Jon Fults, *Delvers Gem & Mineral Society*
via Dec., 2009 *Delvings*

For many decades we have graded the hardness of stones on the Mohs Scale and diamond was 10, the hardest and talc was the softest at 1.

Is it possible that there are harder minerals than diamond? If so, that is "earth-shaking" news!

However, news is leaking out of physics labs in China and in the United States suggesting the mineral **lonsdaleite**, made of carbon like the diamond, is 58% harder than diamond.

If that isn't big news, how about **wurtzite boron nitride**? It is 18% harder than diamond.

Interestingly **lonsdaleite** forms only under the extreme pressure and heat accompanying meteorite impacts. **Wurtzite boron nitride** is a by-product of intense volcanic eruption.

However, we don't have to wait for a meteorite or volcanic eruption as scientists can produce these minerals by simulating the conditions in a laboratory.

John Janik, a physicist for Carnegie Institution for Science along with others is working on bulk producing these minerals. When they figure out how to produce these minerals in bulk, we will begin to see commercial applications.

I learned about this from "Discover Magazine," July/August 2009 in an article written by Adam Hadhazy.

America at a Crossroads

The Presidency is not merely an administrative office It is pre-eminently a place of moral leadership. All our great Presidents were leaders of thought at times when certain historic ideas in the life of the nation had to be clarified

— Franklin D. Roosevelt

A One-of-a-Kind Rockhound Wedding & Field Trip

Cady Mountains - November 7, 2009

photos by Jay Valle



Earth Science Studies
Zzyzx - November 15-21, 2009

photos by John Martin



Earth Science Studies – Camp Paradise 12725 Laporte, Clipper Mill, CA 95930

Emergency Phone Number for Camp Paradise: (530) 675-2689

PLEASE READ CAREFULLY BEFORE REGISTERING.

- 1. Any cancellation *prior* to April 25 will incur a \$25.00 Administration fee.**
- 2. No refunds or cancellations after this date unless a *substitute* is provided.**

Make Checks Payable to: CFMS Earth Sciences

**Send to: John and Anna Christiansen
245 N. 6th Ave
Oakdale, CA 95361 209-847-1173**

**FOR INFORMATION CONTACT:
Marion Roberts or Anna Christiansen
1505 Plumas
Modesto, CA 209-538-0197**

Camp Paradise is approximately 50 miles east of Marysville, CA on Hi-way E-21 (Marysville Rd. towards Brownsville) Elevation is approx. 3500 ft. The facilities are at a rustic church camp, rooms with double beds and/or bunk beds. Bathrooms and showers are communal and located in each building. Housekeeping is the responsibility of each guest. Also available, on a limited basis, are cabins for 4 persons (bathrooms and showers are located nearby. RV space with electricity and water for most spaces is available.. Since it is a church camp, no alcoholic beverages are permitted. Room assignments will be made by staff.

Classes –Beg. Faceting, Ming Trees, Lapidary, Soft Stone Carving, Silversmithing, Lost Wax & Silver Casting, Beginning thru Advanced Wire Art, Copper Enameling, Lampwork Bead Making and Beading, PMC3 Clay & Glass Fusion (Dichroic) and Intarsia

Please note - There will be some classes with limited space, preference will be given to first time students.

*******CHANGES MAY BE MADE AS NECESSARY*******

A list of items that you might want to bring with you will be sent and a list of supplies the instructors would like you to bring.

Please cut along line- Send in lower section- Keep the upper portion so you can refer to it.

+++++

REGISTRATION FORM

Please circle which week or both

Week 1 May 16 – 22, 2010

\$350 A PERSON PER WEEK

Week 2 May 23 – 29, 2010

PRINT CLEARLY

NAME1 _____ NAME2 _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

Phone (_____) _____ EMAIL _____

CLUB (CFMS) _____

Accommodations (CIRCLE ONE) Couples Dorm Dorm Cabin RV Area
Would like to room with _____ (if possible)

Special needs: (Explain Briefly) (Food) _____ Diabetic _____ Vegetarian _____ Other _____

Due to the lack of dietary knowledge and the various interpretations of different needs, we ask that you bring your special food items and we will do our best to prepare them for you.

Animals will be allowed in the R. V. area only and must be on a leash and picked up after. Any violation could result in adherence to their no pets rule.