

Bulletin of the Mineralogical Society of Southern California



Volume 79 Number 11

November 2008

The 848th Meeting of The Mineralogical Society
of Southern California

The Minerals, Rocks and Mining History of Santa Rosalia, Baja California

by

Bonni and Graham Mackintosh

Friday, November 14, 2008, at 7:30 p.m.
Geology Department, E-Building, Room 220
Pasadena City College
1570 E. Colorado Blvd., Pasadena

Featuring:

- November program
- Minutes on October general and board meetings
- Earthquake web site and books
- Bill in Congress may affect your fossil collecting hobby
- Handbook of Mineralogy now available on the web

November Meeting



Bonni and Graham Mackintosh on the Minerals, Rocks and Mining History of Santa Rosalia, Baja California

By Janet Gordon

The Friday, November 14, 2008 meeting will feature Bonni and Graham Mackintosh, who will speak on “*The Minerals, Rocks and Mining History of Santa Rosalia, Baja California.*” During the mid-1990’s Bonni and Graham traveled many times to the Santa Rosalia region of southern Baja, camping and mineral collecting in the desolate canyons that make up the world-famous copper mining district. Their presentation highlights those trips, including photos of the historic French-built town and smelter facilities where the El Boléo Company headquartered from the 1880’s to the 1950’s. Bonni and Graham’s finds of rare cumengeite crystals, including “sixlings” overgrown on boleite cubes led to an article in *Rock and Gem* and even a footnote in *Mineralogical Record*’s special Boléo edition. You will enjoy contrasting this 90’s view of historic Santa Rosalia with the latest mining happenings by checking out www.bajamining.com.

Bonni Mackintosh is a registered nurse, who as a lifelong rockhound came to San Diego from Chicago in 1974. She and Graham have been traveling together in Baja California and rockhounding since 1993, and they joined San Diego Mineral and Gem Society not long afterward.

Graham Mackintosh, originally from England, is a travel writer, lecturer and author of four books detailing his on-foot

adventures throughout Mexico's Baja California peninsula. *Into a Desert Place* (1988) tells the story of Graham's two-year backpacking trek around Baja's dramatic coastline. In *Journey with a Baja Burro* (2000), he recounts his 1000-mile burro-assisted walk along the mission trail to Loreto, site of Baja's first permanent Spanish mission. *Nearer my Dog to Thee* (2003) details four months exploring the pine forests of northern Baja in the Sierra San Pedro Mártir. *Marooned with Very Little Beer* published this spring, takes you to a desert island in the Sea of Cortez where Graham on foot and kayak observes all things insular. Graham will have copies of his books available--for additional information, please go to grahammackintosh.com.

As usual the meeting will be held in the Geology Department of Pasadena City College at 7:30 p.m. in E-Building, room 220. All are welcome.

Minutes of the October 10, 2008 Meeting

The 847th meeting of The Mineralogical Society of Southern California was held on Friday, October 10, 2008, at Pasadena City College. President Geoff Caplette brought the meeting to order at 7:30 p.m.

Vice President Janet Gordon then introduced the speaker of the evening, Dr. Nancy King, who gave a presentation entitled: "Earthquake Hazards in Southern California."

Dr. King, who has a Ph.D. in geophysics from the Scripps Institution of Oceanography, has been employed as a geophysicist at the United States Geological Survey (USGS), specializing in crustal deformation. She is currently Chief of the USGS Southern California Earthquake Hazard Assessment Project.

Dr. King explained that earthquakes happen on the boundaries of tectonic plates, and described different types of plate movement, including collision, subduction, and sliding. She indicated that a sudden fault slip causes shaking, and

discussed the different types of seismic waves. She stated that the level of shaking depends on magnitude, geology, distance and directivity, discussed instrumentation used to assess earthquake magnitude, and clarified the difference between the terms “epicenter” and “hypocenter.” She also related that tsunami events, landslides, and liquefaction could be triggered by earthquakes.

It was interesting to learn that about 30 earthquakes per day are detected in Southern California, and that individuals can access the Recent Earthquakes Map on the web.

During her discussion, Dr. King showed photographs of faults present throughout California, but cautioned that recent earthquakes occurred on faults without surface expression.

Dr. King concluded her talk by describing current geological research, and providing practical safety tips.

Janet Gordon announced that Rock Currier would be holding his annual open house at Jewel Tunnel Imports, and that further details would be provided in the next bulletin.

The door prize was won by Ann Meister.

The meeting was brought to a close by President Caplette at 8:55 p.m.

Respectfully submitted, Pat Caplette Secretary

Minutes of the Board Meeting

The October 2008 Board Meeting of The Mineralogical Society of Southern California was held at Pasadena City College on October 10, 2008, immediately following the regular meeting. In attendance were the following MSSC members: Janet Gordon, Bob Housley, James Imai, Fred and Linda Elsnau, and Geoff and Pat Caplette.

A successor to Janet Gordon, regarding the identification and retention of speakers for monthly MSSC meetings, is needed. Although Dr. Gordon announced that speakers have been obtained for meetings through the January banquet, February is quickly approaching. Candidates are encouraged

to apply, and input from MSSC members is also welcome.
Please email Geoff Caplette with your suggestions.

Bob Housley announced that Walt Margerum would continue, in a non-MSSC capacity, to perform many of those functions that he has undertaken over the years with regard to the annual Pacific Micro-Mount Conference. We thank him for his help and welcome his assistance.

There being no further business, President Caplette brought the meeting to a close at 9:30 p.m.

Respectfully submitted, Pat Caplette Secretary

You are invited
Open house at Jewel Tunnel Imports
Saturday, December 13, 2008, 10 AM to 4PM

13100 Spring St., Baldwin Park, CA 91706, 626-814-2257

Map available at jeweltunnel.com

Refreshments will be served.

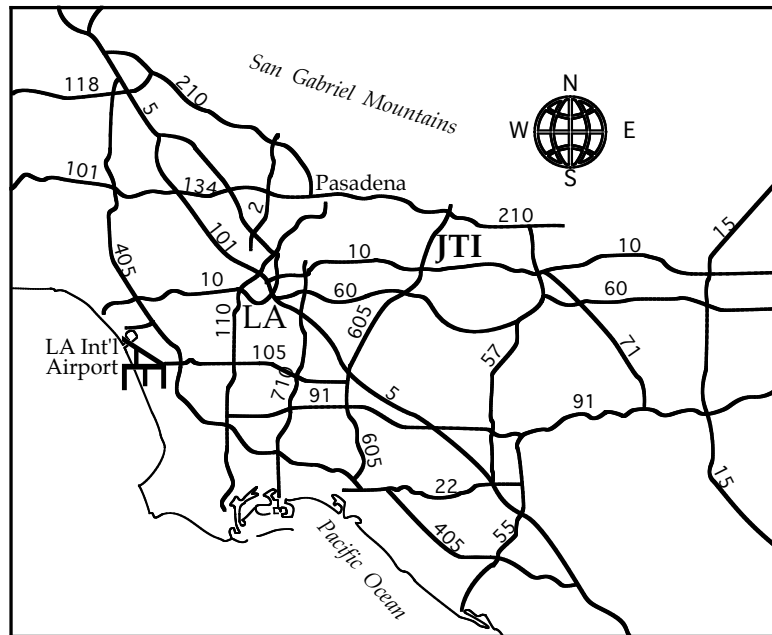
Jewel Tunnel Imports is a leading wholesale distributor of mineral specimens, crystals, fossils, tumbled stones and many different kinds of lapidary items like balls, eggs, jewelry etc. made from different minerals. We have a warehouse in excess of 10,000 sq. feet full of mineral related natural history items, perhaps the largest of its kind in the United States.

The owner of Jewel Tunnel (Rock Currier) is also interested in learning about new sources of mineral specimens and has been known to buy and trade such items. He is a micromounter and always interesting in trading for good micromount material not represented in his collection.

Historically Jewel Tunnel Imports has had limited open house parties for mineralogically and geologically oriented groups, such as the students and faculty of various university geology departments and members of certain gem and mineral societies. These open houses, by invitation only, on a few weekends just preceding Christmas, offer a chance

for individuals belonging to these groups to buy minerals and crystals at wholesale prices and to learn something about the wholesale gem and mineral business.

Directions to Jewel Tunnel Import's warehouse.



Earthquake Web Sites and Books

Editor's note: Following is a list of earthquake web sites and books that Dr. Nancy King handed out in the meeting. Dr. King urged everyone to log on the Did you feel it site to enter your experience of the earthquake.

- USGS main page <http://www.usgs.gov/>
- USGS earthquake pages <http://earthquake.usgs.gov/>
- USGS southern California earthquake pages
<http://earthquake.usgs.gov/regional/sca/>
- USGS northern California earthquake pages
<http://quake.wr.usgs.gov/>

USGS links to other regions
<http://earthquake.usgs.gov/regional/>

USGS recent world earthquakes
<http://earthquake.usgs.gov/eqcenter/recenteqsww/>

USGS recent USA earthquakes
<http://earthquake.usgs.gov/eqcenter/recenteqsus/>

USGS recent S. CA. earthquakes
http://earthquake.usgs.gov/eqcenter/recenteqsus/Maps/special/California_Nevada.php

USGS Shake Maps
<http://earthquake.usgs.gov/eqcenter/shakemap/>

USGS "Did You Feel It?"
<http://earthquake.usgs.gov/eqcenter/dyfi/>

USGS Northridge report
<http://pubs.usgs.gov/of/1996/ofr-96-0263/>

Southern California Earthquake Center (SCEC)
<http://www.scec.org/>

SCEC clickable fault map
<http://www.data.scec.org/faults/faultmap.html>

SCEC clickable earthquake map
<http://www.data.scec.org/clickmap.html>

"Putting Down Roots in Earthquake Country"
<http://www.scec.org/resources/catalog/roots.html>

California Geological Survey <http://www.quake.ca.gov/>

Office of Emergency Services <http://www.oes.ca.gov/>

Caltech Seismological Lab <http://www.seismolab.caltech.edu/>

UC Berkeley Seismological Lab <http://seismo.berkeley.edu/>

Earthquake Country Alliance
<http://www.earthquakecountry.info/>

California seismic network <http://www.cisn.org/>

November 13, 2008 Southern California Shakeout
<http://www.shakeout.org/>

Bolt, Bruce, *Earthquakes*

Hough, Susan Elizabeth, *Earthshaking Science*

Hough, Susan Elizabeth, *Finding Fault in California*

Iacopi, Robert, *Earthquake Country: How, Why, and Where Earthquakes Strike in California*

Sharp, Robert P., *Geology Underfoot in southern California*
Yanev, Peter, *Peace of Mind in Earthquake Country*

Field Trip Announcement

By James Imai

November Field Trip: Fossil Leaves. Fossils are a departure from minerals, which are the mainstay of the MSSC. However, in view of the enthusiastic interest generated in Dr. Bryan Wilbur's fine presentation on Cambrian Echinoderms in September, a short field trip to collect fossil leaves in the nearby Angeles National Forest is planned for Saturday November 22. The site is both nearby and easy to reach. The fossils occur in what appears to be a rhyolitic ash bed. The most common leaf in this location is a species of elm, but others also occur. Collection of fossils are uniquely different from minerals in that persistence and luck both play an important part; with the latter having the most influence. The conditions which allow the preservation of living matter into stone are very special; and it requires an element of luck to pick just the correct rock, and to split it in just the correct layer to expose the specimen. Dogged persistence helps, but luck is often more productive.

Nearby are several sites of mineralogical significance. These include: the Tick Canyon Borate area (the site is currently fenced by US Borax, but small Howlite (calcium borosilicate) and Colemanite (calcium borate) may be found in the gully which washes out of the property), Soledad and Bear Canyon area which have good massive ilmenite/magnetite (titanium and iron oxides), hornblendites, and plagioclase to the south, and chalcedony to the north side, and San Franciscito Canyon with very tiny gold flakes in placer deposits along the creek. Also nearby is Placerita Canyon State Park with shaded hiking trails and the fabled "Oak of the Golden Dream" which predated the California Gold Rush by several years.

To attend the fossil dig, exit the 14 freeway at Sand Canyon, and go south about ¼ mile to the first boulevard stop sign at Lost Canyon Road. Meet there at 10AM. The weather conditions are unpredictable so far in advance, so prepare appropriately, for sun or wind. If you wish to visit some of the alternate areas, a map will be provided for your convenience.

Attention all Fossil Collectors

A Bill in Congress May Put Your Innocent Hobby in Jeopardy

The October 2008 issue of California Federation of Mineralogical Societies (CFMS) Newsletter listed several bills in Congress, which if passed, might affect rockhounds' ability to engage in mineral and fossil collecting. These bills are: S. 493: California Wild Heritage Act of 2007, introduced by B. Boxer [D- CA], H.R. 860: California Wild Heritage Act of 2007, introduced by Hilda Solis [D-CA], S. 3069: Eastern Sierra and Northern San Gabriel Wild Heritage Act, introduced by B. Boxer [D- CA], H.R. 6156: Eastern Sierra and Northern San Gabriel Wild Heritage Act, introduced by Howard McKeon [R-CA], and HR554, Paleontological Resources Preservation Act. Both American Federation of Mineralogical Societies (AFMS) and CFMS urged members to write to their representatives to veto the bills.

One particular bill, Paleontological Resources Preservation Act, HR554, if passed will make certain fossil collecting activities in federal land a federal crime. The latest major action on this bill was on October 3, 2008. House Committee on Judiciary granted an extension for further consideration ending not later than January 3, 2009. The full bill is a sixteen page long document and can be found at www.govtrack.us. The following is a summary of HR 554

from www.govtrack.us/congress/bill.xpd?bill=h110-554&tab=summary

5/22/2008--Reported to House amended, Part I.
Paleontological Resources Preservation Act –

Section 3 -

Directs the the Secretary of the Interior or the Secretary of Agriculture, as appropriate, to: (1) manage and protect paleontological resources on federal land, using scientific principles and expertise; and (2) develop plans for inventorying, monitoring, and deriving the scientific and educational use of such resources.

Section 4 -

Directs the Secretary to establish a program to increase public awareness about such resources.

Section 5 -

Prohibits a person from collecting a paleontological resource from federal land without a permit issued under this Act. Authorizes the Secretary to allow casual collecting of a reasonable amount of common invertebrate and plant paleontological resources for non-commercial personal uses without a permit on certain federal lands. Recognizes as valid permits issued before enactment of this Act. Sets forth criteria by which the Secretary may issue permits for paleontological resources. Requires that any paleontological resource and associated records collected under a permit be deposited in an approved repository. Allows the Secretary to modify, suspend, or revoke a permit under specified circumstances, including if there is a violation of a term or a condition of a permit. Declares that a permit shall be revoked if any person working under the authority of the permit is convicted of a criminal offense under this Act or assessed a civil penalty under this Act.

Section 6 -

States that the Secretary may enter into agreements with non-federal repositories regarding the curation of paleontological resources, data, and records.

Section 7 -

Prohibits: (1) evacuating, removing, or altering a paleontological resource located on federal lands, except in accordance with this Act; (2) exchanging or receiving a paleontological resource, or selling or purchasing a paleontological resource, if the person knew or should have known such resource was illegally removed from federal lands; or (3) making or submitting false records, accounts, or identification of any paleontological resource excavated or removed from federal lands. Imposes criminal penalties for violating this Act.

Section 8 -

Sets forth requirements for the assessment of civil penalties by the Secretary for violations of any prohibitions contained in regulations or permits issued under this Act. Requires any recovered amounts to be available for use: (1) to protect or restore paleontological resources and sites which were the subject of the action, or to acquire sites with equivalent resources, and to protect, monitor, and study the resources and sites; (2) to provide educational materials to the public about paleontological resources and sites; and (3) as a reward.

Section 9 -

Allows the Secretary to pay a reward from penalties collected under this Act to any person who furnishes information leading to the finding of a civil violation, or the conviction of criminal violation, with respect to which the penalty was paid. Subjects to civil or, as appropriate, criminal forfeiture all paleontological resources with respect to which a violation occurred and all vehicles and equipment that were used in connection with the violation. Allows the Secretary to transfer administration of seized paleontological resources to educational institutions for scientific or educational purposes.

Section 10 -

Requires that information on the nature and specific location of a paleontological resource that requires a permit under this Act or other federal law be withheld from the public, including under the Freedom of Information Act, except under specified conditions.

Section 11 -

Directs the Secretary to issue such regulations as are appropriate to carry out this Act.

Section 13 -

Authorizes appropriations.

Handbook of Mineralogy Available on the Web

by Janet Gordon

One of the great modern mineral reference works is available on the web. This five-volume set, which takes up 9 inches of space on my book shelf, is now available to everyone electronically. The Handbook of Mineralogy was authored by John W. Anthony, Richard A. Bideaux, Kenneth W. Bladh, and Monte C. Nichols and originally published by Mineral Data Publishing, but the copyright was eventually given to the Mineralogical Society of America by the authors or their heirs.

The MSA established a committee to convert the text to PDF files for free on-line access through the MSA website and to keep the database up to date. There are now files for 3,736 minerals that may be accessed by first letter of the name. The searching by chemical composition is under construction as of this writing.

Say you wanted to know more about that gemmy blue crystal of jeremejevite that you just bought or perhaps coveted in someone's display case at Tucson: go to www.handbookofmineralogy.org, click on "By First Letter." then click on "J" and finally on "jeremejevite. Up comes a PDF file with the mineral's formula, crystal data, physical properties, optical properties, x-ray powder pattern, chemistry, occurrence, associated minerals, where it has been found, how it was named and selected references. Did you know that jeremejevite can be yellowish brown as well as cornflower-blue? And how about looking for a specimen from Siberia instead of Namibia? In short, this is a great place to just look up mineral data, and it doesn't have the commercial feel or other distractions of mindat.org.

West Coast Fall
GEM&MINERAL SHOW

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Fax: (505) 867-0073, email: mz0955@aol.com, www.mzexpos.com

2008 Calendar of Events

- November 1-2 2008, Anaheim,** American Opal Society Clarion Hotel
Anaheim Resort 616 Convention Way Saturday 10 to 6, Sunday
10 to 5 paid admission.
- November 1-2 2008, Concord,** Contra Costa Mineral & Gem Society
Centre Concord - 5298 Clayton Rd. Clayton Fair Shopping Center
Hours: 10 - 5 both days
- November 1 - 2 2008, Ridgecrest,** Indian Wells Gem & Mineral Society
Desert Empire Fairgrounds, Mesquite Hall 520 S. Richmond Rd.
Hours: 9-5 both days
- November 1 - 2 2008, San Diego,** San Diego Mineral & Gem Society Al
Bahr Shrine Center 5440 Kearny Mesa Road Hours: Sat. 9:30-
5, Sun 10-4
- November 7, 8, 9 2008, Eureka,** Humboldt Gem & Mineral Society
Redwood Acres Fairgrounds 3750 Harris Hours: Fri. 9-6, Sat. 10-
6, Sun. 10-5
- November 8-9 2008, Lancaster,** Palmdale Gem & Mineral Society
Antelope Valley Fairgrounds 2551 W. Ave. H, Hwy 14 Hours: 9 -
5 both days
- November 8 - 9 2008, Yuba City,** Sutter Buttes Gem & Mineral Society
"Festival of Gems" Grace Franklin Hall 442 Franklin Avenue
Hours: Sat. 9 - 5; Sun. 9 - 4
- November 22-23 2008, Livermore,** Livermore Valley Lithophiles G & M
Club The BARN 3131 Pacific Ave. (East of Livermore Ave.)
Hours: Sat. 10 - 5, Sun. 10-4

November 22-23 2008, Oxnard, Oxnard Gem & Mineral Society
Performing Arts Center 800 Hobson Way Hours: Sat. 9 - 5, Sun.
10-4