

Bulletin of the Mineralogical Society
of Southern California

Volume 82 Number 8 August 2011

The Meeting of the Mineralogical Society of Southern California

No Meeting in Pasadena in August
Picnic & Swap, Fallbrook, 12 noon 8/20/20 11 at pm
123 W. Alvarado St., Suite B, Fallbrook, CA 92028

In this issue:

--Programs Special Picnic/Potluck & Swap in Fallbrook	Page 2
--Meanderings from the President - Ann Meister	Page 3
--Minutes of the 7/8/2011 General Meeting	Page 4
--Jim Imai	Page 4
--Mineral Cleaning for Amateurs: Muriatic Acid (Page 12 of 4)	Page 5 to Page 7
How you can support the California State Mining and Mineral Museum	Page 8 to Page 10
Natural History Museum, Los Angeles County Internet site	Page 11 to Page 12
From MSSC Archives, Mining in Pasadena	Page 13 to Page 15
Chilly Times for Chinese Dinosaurs: Abundance of Feathered Dinosaurs During Temperate Climate With Harsh Winters	Page 15 to Page 17
--Calendar of Events	Page 17
--Society Officers	Page 17
--About MSSC	Page 18



August Meeting and Program is the Pot Luck and Swap Meet in Fallbrook.

THE POTLUCK Saturday, August 20, 2011

The potluck will run from 12 PM to 1 PM at the Fallbrook Gem & Mineral Society's Museum (123 W. Alvarado St., Suite B, Fallbrook, CA 92028). The swap meet will run from 1 PM to 4 PM. The building will be opened @ 11 AM for arrival and setup. Sorry, no selling/trading until the potluck has ended.

Please feel free to attend even if you don't plan to sell or trade (you can still eat and still buy). If you have not been to the museum before, it is a real treat. You've all been to potlucks before so you know what to do. We will be eating indoors with air conditioning. FGMS will supply plates, cups, napkins, knives, forks and spoons and will also supply beverages and ice. It is suggested you bring any serving utensils and mark them so you're sure to get them back. Let's see what delicacies turn up this year!

THE SWAP MEET! After the Potluck on August 20, 2011

You may bring a limited amount of items to sell or trade that are related to gems/jewelry, lapidary, minerals or fossils. Table space is limited and you may only get half of a table to set up on. You may also put boxes or flats underneath your allotted table space. Please do not bring items that you do not intend to sell or trade. If an item is sold or involves a cash & trade arrangement we ask you to make a 10% contribution (not to exceed \$100) to the FGMS building fund to help keep events like this to continue in the future. Please bring your own change for your transactions as we will not be playing banker. Also, we are providing a place so that a mineral swap meet can occur but will not be responsible for any transactions or trades that occur.

THIS EVENT IS OPEN TO ALL MEMBERS OF THE SOCIETIES INVITED AND THEIR GUESTS RSVP BY AUGUST 13, 2011 PLEASE

- Elizabeth Moller is donating several boxes of mineral books (and other books of interest to us) for sale at the Swap Meet. These books have several things going for them: Books personally chosen by Bill Moller for his personal collection
- Mineral books will be offered at less than list price (of course they have been previously read).

Funds go to a worthy organization (MSSC & Fallbrook Gem & Mineral Society).

MEANDERINGS FROM THE PRESIDENT by Ann Meister

I just returned from the memorial for James Imai, who was an MSSC member for many years, a board member, an avid mineral collector who also enjoyed micro-minerals, and a good friend. Jim retired from his position as professor of physics at California State University, Dominguez Hills in 2005. He was 71 years old. I would like to thank Linda Elsnau for volunteering to step into his position on the board. The board is an important part of the Society as it directs where we are going and what we are doing.

For those who did not come to the Open House at Nevada Mineral and Book Company, you missed an enjoyable afternoon looking at minerals and books. Our host, Walt Lombardo unearthed some treasures that he had collected many years ago.

Enjoy the upcoming picnic. I find it interesting to get together with the Fallbrook Society members, swapping collecting stories and other coups of our hobby, and finding treasures in the mineral swap. Fallbrook is an active group which runs the Fallbrook Gem and Mineral Museum and participates in various community activities. We should see how we can start doing more with the community also. The details for the picnic are elsewhere in the bulletin

Minutes of July 8, 2011 Meeting

The 878th meeting of the Mineralogical Society of Southern California was held on Friday, July 8, 2011 at Pasadena City College. President Ann Meister called the meeting to order at 7:35 pm.

There were announcements about upcoming shows and the Open House at Nevada Mineral and Book Co. on Sunday, July 17. The Board needs to set a date and location for the October Board Meeting. Our next meeting is the joint picnic with the Fallbrook Gem and Mineral Society.

Bruce Carter introduced the speaker, Jim Harrell. The program topic, "Ancient Egyptian Mines for Peridot and Other Gemstones" was illustrated with slides of the speaker's travels in Egypt looking for the source of various stones used in Egyptian art and jewelry, including amethyst, chalcedony, turquoise, emerald and peridot. The mines are remote and in barren desert terrain. The intriguing presentation was followed by a discussion.

Visitor Danusia Niklewicz won the door prize.

As there was no further business, the meeting was adjourned at 9:00 pm.

Respectfully submitted,
Ann Meister, Secretary Pro Tem

Jim Imai

I want to take a little time to talk about Jim. I remember him as always inquisitive and willing to learn. He loved going to the Antelope Valley area to see the poppies in spring--in fact he had his special places that he liked to visit. +Jim Kusley said "I only wish I knew Jim a little better. We never really got the time to pursue our common interests which besides minerals were Japanese cooking, antique fire arms and early home stereo systems. I learned yesterday that Jim was a consultant for Daiwa <http://www.tackledirect.com/daiwareels.html> and the company president attended his memorial. The largest percentage of people at his memorial were members of the Palos Verdes Gem & Mineral Club".

One measure of a person is that those of us remaining are left with a wish that we had known him better. We shall certainly miss him.

Mineral Cleaning for Amateurs

By John Betts. All rights reserved. Reprinted with permission of the author.

Many specimens collected in the field do not look like the ones that dealers are selling. Most collectors become discouraged or frustrated. These articles will give a few simple techniques clean the pieces you collect.

Muriatic Acid Now we are going to get more aggressive with our mineral cleaning technique. Hydrochloric Acid is available in most hardware store as Muriatic Acid. It is sold in one gallon containers and is used to clean masonry and as a rust remover, which is what we will use it for. In spite of it's availability, it is dangerous. Do not inhale the fumes or get any on your skin or in your eyes. Always wear gloves and eye protection and old clothes. Keep your arms covered even if it is a hot day. And always observe the safety precautions on the container. There are two main uses for hydrochloric acid: removing carbonates like calcite that often are the last minerals to form in a pocket and therefore obscure other mineral crystals, and the more aggressive removal of iron oxide rust stains (faster than oxalic acid). The former use is the most common and often produces staggeringly beautiful specimens because the calcite being dissolved protected the minerals underneath. Specimens of almandine from the Trumbull, Ct. diggings, or vesuvianite from the Goodall Q. in Sanford, Maine, or spinel or franklinite crystals in Franklin Marble are all cleaned in hydrochloric acid. If hydrochloric is being used to remove iron oxides you should be careful that there are no carbonates in the specimen that you want to keep. The acid will dissolve them. Which is why, no matter what minerals you are cleaning, always test your cleaning agents on lesser pieces to make sure you will not ruin your best pieces. The basic procedure is: First wash your minerals carefully in water to remove any loose sand and dirt and to make the acid last as long as possible (sand and dirt contain iron oxide and will exhaust your acid quickly).. Place your minerals in a large plastic container with a lid that can be tightly sealed. Again I prefer a five gallon joint compound bucket found at construction sites. Let your specimens dry and move the container outdoors to an area with good ventilation. Pour in enough acid to cover the

specimens. Always wear heavy rubber gloves and be very careful not to splash any acid on yourself. Depending on what you are removing with the acid you will want to leave it in from 5 minutes to 5 days. If you are etching carbonates/calcite off a specimen then you should check it after five minutes. Be careful not to inhale any fumes when checking the progress. When removing calcite or marble from specimens the action is very fast and active. Your bucket should be large enough to prevent the bubbling foam from overflowing. If you are removing rust stains from quartz the action can take up to a day and is less energetic. When removing the "sphalerite" crust on quartz crystals from the Spring Glen Mine in Ellenville it is not uncommon to repeat three day sessions removing any loose material between each session. You can place the lid on the bucket to prevent children and animals from exposure (but provide a small vent hole for relieving gas pressure). According to Jerry Call, a commercial mine owner in Brazil and North Carolina, you should not leave the bucket in the light. He says this results in a yellow stain. Whether light is the source of the stain I cannot tell, but it is not uncommon for some residual acid/rust stain to remain after your first treatment. Then you need a second treatment in fresh, clean acid reserved for such a purpose. You will see the stain disappear quite quickly and you can remove your specimens for neutralizing and washing. This final batch can be diluted 1:1 with water. When diluting always add acid to water, NOT WATER TO ACID.. People neutralize the acid many different ways. I prefer to dissolve ordinary household baking soda in a bucket of warm water the immerse your specimens in it (after a brief pre-rinse). Let them sit in the baking soda solution for 15 minutes, then proceed with washing. Because the acid has penetrated the specimen it is best to wash very thoroughly. I prefer the rule of thumb of washing three times the time the duration the specimen was in acid. If you just briefly dipped it for 5 minutes to remove some calcite then a 15 minute wash will be adequate. But If you left in your quartz specimens in for removing rust stains for a full day, then you should wash them for at least three days. The washing is essentially placing them in clean water and keeping the water clean as the acid diffuses out of the specimens. It is best if you can set a water supply on a slow trickle into the bucket to constantly provide clean water. Otherwise changing the water as often as possible will work. If you are washing for a full day then a water change schedule like this would be appropriate: change water every 15

minutes for an hour; then every hour for four hours; then every four hours for the rest of the day. (See washing instruction in the section on Oxalic Acid above) As the acid is used up it will eventually turn yellow/green/brown. It can be used until it no longer is effective or until it starts to stain your specimens. If you are using it to dissolve carbonates/calcite the acid will exhaust itself long before the color changes. You will see that it no longer actively dissolves the calcite. It should then be discarded. You can fully neutralize your old acid with crushed limestone or marble or with more baking soda. When it no longer fizzes then you can dispose of the acid safely. The limestone gravel found at the Limecrest Quarry in New Jersey is great for neutralizing the acid. A last warning, if you are removing calcite from a specimen, do not dissolve all calcite. Often it may be the only thing holding the specimen together. A little calcite can provide a nice contrast and make it more aesthetic. In the case of the spinel crystals from the Limecrest Quarry, there are often alternating layers of spinel and calcite. They will crumble to powder if cleaned too long in hydrochloric acid. Also fluorescent willemite may turn powdery on the surface if cleaned in acid resulting in the loss of fluorescence

References Hansen, Mogen, Cleaning Delicate Minerals, Mineralogical Record, March-April 1984, pg. 103

Part 1: Oxalic Acid

Part 2. Muriatic Acid

Part 3 Mechanical Methods

Part 4 The "Waller" Solution

This article and others can be found at Mr. Betts web site:

<http://www.johnbetts-fineminerals.com>". Reprinted with permission of the author

MSSC is not responsible for any problems that may result from the use or misuse of these instructions.

WEST COAST - FALL GEM & MINERAL SHOW

Exciting Holiday Shopping!

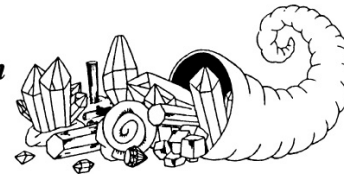
NOV. 11 - 13, 2011

**Holiday Inn - Orange County Airport
2726 S. Grand Ave., Santa Ana, CA 92705**

(Take 55 Fwy exit 8 for Dyer Rd. to S. Grand Ave.)

Just 2 miles from our former Costa Mesa location

80 Top Quality Dealers!



*Minerals • Fossils • Gemstones • Jewelry • Beads • Meteorites
Lapidary • Metaphysical*

FREE ADMISSION & PARKING • WHOLESALE • RETAIL

Show Hours: Fri. & Sat. 10 - 6 • Sun. 10 - 5

Martin Zinn Expositions, L.L.C., P.O. Box 665, Bernalillo, NM 87004

Fax: (303) 223-3478, mzexpos@gmail.com, **www.mzexpos.com**

In the June 2011 MSSC Bulletin we listed the 70 proposed State Parks to be closed. Included in that list was the California State Mining and Mineral Museum. As you can see from the two letters below (forwarded to be by Bob Housley), many are not happy with that proposal. They would like all other people who are not happy with that proposal to do what they did and write a letter. In fact, you do not need to limit yourself to Governor, you can send letters to your CA State Senator and State Representative. Copy of letter from California State Mining and Mineral Museum to the Society of Mineral Museum Professionals

From: Society of Mineral Museum Professionals

[\[mailto:SMMP@LISTSERV.NHM.ORG\]](mailto:SMMP@LISTSERV.NHM.ORG) On Behalf Of Moore, Darci

Sent: Sunday, July 24, 2011 10:29 AM

To: SMMP@LISTSERV.NHM.ORG

Subject: California State Mining and Mineral Museum needs your support

Dear mineral museum professionals,

The California State Mining and Mineral Museum is once again on the State Parks closure list for the third year in a row and unfortunately it looks very dire for us this time around. In an effort to garner grassroots support for the museum I have created a facebook page and would like to invite you to comment or voice any concerns you may have regarding our closure. The museum houses and displays the Official State Collection of gems and minerals which was created in 1880 by the California state legislature. The collection has been on continuous display for 131 years. If we close it is very likely the collection will go into storage for a very long time and will be inaccessible to the public and the academic community.

We appreciate any support you can offer. The link to our facebook page is:

<http://www.facebook.com/pages/California-State-Mining-and-Mineral-Museum/192306770823629>

Thank you for your help!

Darci Moore

CuratorII

California State Mining and Mineral Museum

209-742-7625 PH

209-966-3597 Fax

Copy of a letter Bob Reynolds has sent to Governor Brown on behalf of the Southern California Chapter, Friends of Mineralogy:

The Honorable Jerry Brown
Governor of the State of California
c/o State Capitol, Suite 1173
Sacramento, CA 95814

Re: California State Mining and Mineral Museum

Dear Governor Brown,

I am writing on behalf of the Southern California Chapter of the Friends of Mineralogy, a not-for-profit organization of mineral educators, museum curators and scientists, devoted to supporting and expanding the knowledge that minerals and mining are an important part of the history and current economy of our nation. In California, we recognize the status of the economic, scientific, and aesthetic value of mineral specimens, and the historic part that they have contributed toward California statehood.

Our group is disturbed to learn that the California State Mining and Mineral Museum is once again on the State Parks closure list. Although the state budget is challenged, we believe that museum closure will start an irreversible action that could result in the loss an irreplaceable historic and scientific collection. The Museum curates the official state collection of gems and minerals which document more than 131 years of California mining history.

The California State Mining and Mineral Museum is an important attraction for tourists and an important educational resource for California schools and geologic researchers. The collection is part of our state's heritage. The collection must remain open for public interpretation and research.

The Southern California Chapter of the Friends of Mineralogy respectfully requests that you reconsider this fateful and irreversible action.

Thank you for your attention in this matter.

Sincerely,

Robert E. Reynolds, President
Southern California Chapter, Friends of Mineralog

Natural History Museum, Los Angeles County

Previous bulletins had articles about on-line museums. We in Los Angeles are fortunate to have Natural History Museum, Los Angeles County. This museum is a wonderful place to visit in person (try to not drool on the case--they are that good). Occasionally there is not enough time to go there in person--so take a look at what they have put on their web site (<http://www.nhm.org/site/explore-exhibits/permanent-exhibits/gems-minerals>). The main page starts with the Curator's Favorites: Benitoite, Elbaite Tourmaline, Silver Spessartine Garnet & Gold. As one progresses through the site one can learn more about gems & Minerals and even find clubs for enthusiasts (including MSSC!).

If you are interested in learning more about rocks and minerals, this site is loaded with information. All one needs is a computer and interest. I am sure you have heard about the Gem and Mineral Council of the NHA. This site will tell you about their special events, lecturers, and field trips. Under Mineralogical Research you can read about the many mineral descriptions by Dr. Tony Kamph (1974 to date) which proves what we already know, he is a busy man.

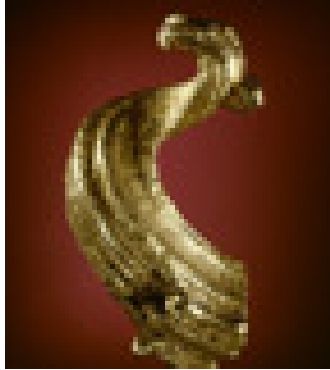
Take the time to see what you have been missing.



Benitoite

(From the Benitoite Gem mine, San Benito County, California)

California's official state gemstone, benitoite occurs in gem quality at only one place in the world, a mine in the Diablo Range of San Benito County, California. This unique wreath-like intergrowth is one of the finest known specimens of the gem



Gold

(From the Groundhog mine, Gilman, Colorado) Appearing much like a "ram's-horn", this natural wire gold is one of the finest known. It was found around 1878 and is said to have once belonged to Dr. David H. Dougan, the first mayor of Leadville, Colorado.

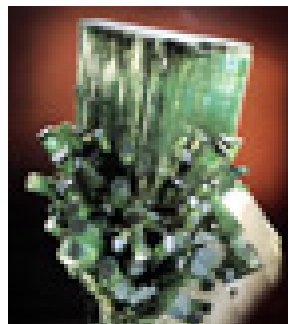
Photo: Harold and Erica Van Pelt



Silver

(From Kongsberg, Norway)

This natural silver "wire" came from the famous mines at Kongsberg, Norway. These mines operated continuously from 1623 until 1957, yielding some of the most beautiful specimens of silver known.



Elbaite tourmaline

(From the Cruzeiro mine, Minas Gerais, Brazil)

The Cruzeiro mine has long been one of the world's largest producers of fine gem tourmaline. This specimen, found in 1972, is one of the most dramatically beautiful to come from the mine.

Photo: Harold and Erica Van Pelt



From MSSC Archives

Reprinted from the January 1932 Bulletin

MINING IN PASADENA

E. V. Van Amringe

Although never noted as a mining district, the Pasadena territory has been prospected for minerals since early days. The writer, in geological rambles in the foothill region between the Arroyo Seco and Eaton Canyon, has often noticed old pits and ditches in the washes, and holes in the mountainsides. What follows is the result of a few day's search of early books and files in an attempt to learn a little of their history.

It was only a scant eight years after the discovery of gold in Placerita Canyon by Francisco Lopez in 1842, that Carlos Hanewald and John Pine signed a contract with Manuel Garfias, owner of Rancho San Pasqual, to purchase a square mile of land in the Arroyo bottom, vaguely described as "commencing where the Arroyo turns upward on the tillable lands there", for the purpose of washing gold from its sands. The deal was far from our conception of the easy business methods of the time, when land was worth "two-bits" an acre and the shrewd Yankee always has his way. The purchase price was \$2,000; \$600 down, the balance to be paid in a year with interest at 4% per month. Failure meant forfeiture of all payments and improvements. Who came out ahead on this arrangement may be inferred from the ruins of an old adobe near the present location of Brookside Park, and water ditches there and at other places in the Arroyo, objects of much mystery to founders of the Indiana Colony. Similar diggings have often been noted in Eaton and Rubio Canyon washes. However, there must have been some successful operations, for from 1853 to 1871, there were taken from

the placers of San Gabriel, Santa Anita and Eaton Canyons \$2,000,000 worth of gold dust.

The first location of lode claims seem to have been in 1886, when a number were staked by Konstian, Hearn and others on the south flank of Mt. Wilson. The newspapers reported 300 men prospecting, and 38 at work on a new trail to the diggings, and assays from \$50 to \$370 a ton. In this same year assays from \$40 to \$100 were reported from the hills west of Linda Vista where in 1887, J. W. Wilson and son worked a vein of free milling gold quartz running from \$5 to \$26 dollars. As the mineral rights in this area were owned by J. De Barth Shorb, and the royalties demanded by him were prohibitive, operations soon ceased.

In 1892 Carson and Dickey began operations on the "Carrie" mine in the west wall of Pine Canyon, between Eaton and Rubio Canyons, at an elevation of about 3,000 feet above sea-level. A tunnel about 100 feet long was dug, passing through two veins, the first of which was worked by side drifts. They also staked out the "Pine Tree", the "Edith", the "Summit" and the "Surprise" claims, in the same canyon. Ore from these mines assayed from \$75 to \$250 per ton in gold and from \$2 to \$12 in silver. These mines were incorporated into the "Loris Gold Mining Company" on June 22, 1894, the name being that of the daughter of Ed. Kennedy, the president and principal stockholder. A pack trail was constructed, to the wagon road, burros purchased, a mill erected and a steam engine and other machinery installed. The winter of 1894 was dry and the mill was unable to operate, although 50 tons of ore, averaging \$40 a ton, was ready to be worked. The next year the mines were abandoned, and the mill moved away.

Starting at about the same time as the operations in Pine Canyon, Wm. Twaddell located a number of claims in Las Flores Canyon, where Wood and Redway had discovered ore in 1881. The claims were called the "Golden Star", the "Altadena", the "Bald Eagle", the "Jessie Marie", the "Monitor", and the "Pasadena". Although the primary purpose of the tunneling was for irrigation water, one large well timbered shaft was sunk on the "Golden Star" a hundred feet along the dip of the vein. A road was built to the shaft and a mill site surveyed, as the ore obtained averaged \$10 per

ton in gold. But - as seems to be their habit in this region, the veins pinched out, and the values ran too low, and another of Pasadena's mines gave up the ghost.

The last picture in the story of gold is most incomplete and details would be much appreciated. Apparently the only recent operation was at the "Dawn" mine in the bottom of Millard Canyon on the Southwest slope of Mt. Lowe. Here the vein strikes nearly east and west, and dip is almost vertical. There was considerable development by adits in the first decade of the present century, but no large body of ore opened up. The mineral is auriferous pyrite, and many still believe there is much wealth hidden in the granite - but for the last fifteen years only gaping and abandoned caverns intrigue the visitor.

Of other minerals there is little to relate. A deposit of bog-iron ore on an abandoned Santa Fe right-of-way was never worked; a few projected oilwells were never drilled.; and a two-hundred foot tunnel dug by Samuel Carson, son of Kit Carson, at the expense of Prudent Beaudry, in 1876, into the west bank of the Arroyo at Columbia Street, netted them just one ton of coal.

Chilly Times for Chinese Dinosaurs: Abundance of Feathered Dinosaurs During Temperate Climate With Harsh Winters

ScienceDaily (Mar. 13, 2011) — Dinosaurs did not always enjoy mild climates. New findings show that during part of the Early Cretaceous, north-east China had a temperate climate with harsh winters. They explain the abundance of feathered dinosaurs in fossil deposits of that period.

The discovery was made by an international collaboration coordinated by Romain Amiot of the Laboratoire de géologie de Lyon: terre, planètes et environnement (CNRS/ENS de Lyon/Université Lyon 1).

Their work is published in the *Proceedings of the National Academy of Sciences*.

It has long been thought that the climate of the Mesozoic, the age of the dinosaurs, was generally warm across the planet. However, a recent study challenges this

theory. The work focuses on a region of north-east China where the Jehol fauna developed during part of the Early Cretaceous (between 125 and 110 million years ago). The fossils found in this deposit include many dinosaurs covered with filamentous structures similar to bird feathers (such structures can take on various forms, ranging from filaments, down and 'protofeathers' to true feathers). But is this feature due simply to excellent conditions of preservation or to the adaptation of such species to environmental conditions? Since these dinosaurs were unable to fly, several scientists have suggested that their feathers acted as thermal insulation.

A team of paleontologists from France, China, Japan and Thailand examined the issue and tried to determine the temperatures at that time. Teeth and bones from dinosaurs, mammalian reptiles, crocodiles, turtles and freshwater fish from fossil deposits containing the Jehol fauna were collected. This selection of samples was then completed by fossil remains from contemporary deposits in other regions of China, Japan and Thailand. The scientists analyzed the oxygen isotopic composition of each sample. They based their analysis on the principle that the average local air temperature determines the relative quantity of oxygen isotopes contained in the rainwater drunk by the animals. This isotope record is passed on and stored within the bones and teeth of animals as they grow. Since the oxygen contained in the mineralized tissue is preserved during fossilization, the researchers were able to reconstruct the prevailing air temperatures in the environment of Asian dinosaurs during the Early Cretaceous.

The results show that average temperatures in this period of the Early Cretaceous were very similar to those of today at equivalent latitudes (such as the climate in Beijing today). The Jehol fauna therefore lived in a cool temperate climate characterized by harsh winters during which cold-blooded reptiles (turtles and lizards) had to hibernate, whereas the down, feathers and fur of warm-blooded animals (mammals, birds and dinosaurs) enabled them to maintain sustained activity in winter. "These results do not prove in any way that feathers appeared because of their insulating characteristics. They show that feathers would have given the dinosaurs of the Jehol fauna a physiological advantage over their fellow animals with scales," points out Amiot, lead author of the paper and currently a CNRS researcher at the Laboratoire de géologie de Lyon (ENS de Lyon/Université de Lyon 1/CNRS).

This work helps us to better understand the Early Cretaceous period, of which there are few geological records, and sheds new light on existing theories about Earth at the time of the dinosaurs.

The laboratories involved are: Laboratoire de géologie de Lyon: terre, planètes et environnement (CNRS/Université Lyon 1/ENS de Lyon); Laboratoire de géologie de l'École normale supérieure (CNRS/ENS Paris); Institut de physique du globe de Paris (CNRS/UPMC/Université Paris Diderot); and the Institute of Vertebrate Paleontology and Paleoanthropology, Beijing, China.

www.sciencedaily.com via Bob's Rock Shop, www.rockhounds.com

November 11–13—Santa Ana, CA

West Coast Gem & Mineral Show, Holiday Inn—Orange Cnty. Airport, Dire S
Info.—mzexpos@aol.com, or www.mzexpos.com.

Society Contacts for 2010

OFFICERS

President	Ann Meister	<i>president@mineralsocal.org</i>
Vice President:	Bruce Carter	<i>programs@mineralsocal.org</i>
Secretary:	Bob Griffis	<i>secretary@mineralsocal.org</i>
Treasurer	Jim Kusley	<i>treasurer@mineralsocal.org</i>
CFMS Director:	Jo Anna Ritchey	<i>bulletin@mineralsocal.org</i>
Past President	Geoffrey Caplette	

DIRECTORS

2009-2010	Leslie Ogg	<i>webmaster@mineralsocal.org</i>
	Geoffrey Caplette	
	Linda Elsnau:	<i>publicity@mineralsocal.org</i>

COMMITTEE CHAIRS

Facilities	Vacant	
Field Trip	Vacant	
Marketing/On Line Advertising		
	Linda Elsnau	<i>publicity@mineralsocal.org</i>
Membership	Jim Kusley	See Treasurer

Program and Education		Bruce Carter See VP
Show	Vacant	
Webmaster	Leslie Ogg	webmaster@mineralsocal.org
Bulletin Editor	Jo Anna Ritchey	bulletin@mineralsocal.org

About the Mineralogical Society of Southern California

Organized in 1931, the Mineralogical Society of Southern California, Inc. is the oldest mineralogical society in the western United States. The MSSC is a member of the California Federation of Mineralogical Societies, and is dedicated to the dissemination of general knowledge of the mineralogical and related earth sciences through the study and collecting of mineral specimens. The MSSC is a scientific non-profit organization that actively supports the geology department at Pasadena City College, Pasadena, California. Support is also given to the Los Angeles and San Bernardino County Museums of Natural History. The Bulletin of the Mineralogical Society of Southern California is the official publication of the Mineralogical Society of Southern California, Inc.

The MSSC meetings are usually held the second Friday of each month, January, February and August excepted, at 7:30 p.m. in Building E, Room 220, Pasadena City College, 1570 E Colorado Boulevard, Pasadena, California. The annual Installation Banquet is held in January, and the annual Picnic and Swap Meeting is held in August. Due to PCC holidays meetings may vary. Check the Society web page for details. The Society also sponsors the annual Pacific Micro mount Symposium held at the San Bernardino County Natural History Museum during the last weekend of January.

Annual Membership dues for the MSSC are \$20.00 for an individual membership, \$30.00 for a family membership.

The Society's contact information::

Mineralogical Society of Southern California

1855 Idlewood Rd., Glendale, CA 91202-1053

E-mail: bgbrdpen@earthlink.net

Web: <http://www.mineralsocal.org>

The Mineralogical Society of California, Inc.

Permission to reproduce and distribute material originally published herein, in whole or in part, for non-commercial purposes, is hereby granted provided the sense or meaning of the material is not changed, the editor is notified, and the author's notice of copyright is retained . Permission to the material reprinted here in from other sources must be obtained them from the original source.

DISCLAIMER:

The Mineralogical Society of Southern California, Inc. is not responsible, cannot be held responsible or liable for any person's injuries, damages or loss of property at or traveling to or from any general meeting, board meeting, open house, field trip, annual show or any other MSSC event.



Tanzanite

Magnificent natural deep blue tanzanite crystal. Super gemmy with a glimmering luster. If you need a great one. Weighs 39.0 gram.

Size: 4.7 x 2.5 x 1.8 cm

Country: Tanzania

Locality: Arusha Region

Isn't this blue vivid? picture via http://www.palaminerals.com/db_search.php?action=vault