

# PICK&PACK

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

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PICK&PACK  
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CSMS is an incorporated non-profit organization with these goals:

- To promote and disseminate knowledge of the earth sciences, especially as they relate to mineralogy, lapidary, and fossils.
- To encourage study, collection, and fashioning of minerals.
- To accomplish the same through social meetings, lectures, programs, displays, shows, and field trips.
- The Pick & Pack is published monthly to assist and promote the above.

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Colorado Federation of Gem & Mineral Societies (CFGMS)

## Colorado Springs Mineralogical Society

Founded in 1936

Lazard Cahn

Honorary President

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## COOKIN' THE SHALE

BY DR. MIKE NELSON, CSMS

Many members of the CSMS, often those interested in collecting fossils, have walked the local creeks, and/or checked the I-25 road cuts, examining outcrops of a black shale. Most also know the formal name of this geologic unit is the Pierre Shale. The Pierre, and its correlatives (such as the Mancos Shale in western Colorado and Utah and the Bearpaw Shale in Montana), is one of the more wide-spread stratigraphic units in the western United States. The Pierre is a marine shale and was deposited in the vast Western Interior Seaway (WIS; Fig. 1) during the Late Cretaceous (~85 Ma.). The Pierre overlies the Niobrara Formation, a limy deposit representing deposition in the deepest part of the WIS, and lies stratigraphically below the Fox Hills Sandstone, a shoreline/beach deposit. The type locality (where it was named by the geology pioneers Ferdinand Vandever Hayden and Fielding Bradford Meek in 1862) is near Ft. Pierre, South Dakota on the Missouri River. Generally speaking, the Pierre is a dark (gray to black) shale with abundant fossiliferous concretions (Fig. 2), beds of bentonite (altered volcanic ash), and seams and isolated beds/

crystals of gypsum. Often the Pierre weathers quite easily and is covered with vegetation so that most good exposures are in artificial cuts or stream banks. The Pierre is often fossiliferous and several of our members have collected quite nice baculites and ammonites. Jimbo Buck may be the premier collector in the Society of Pierre fossils and has contributed numerous specimens to the research collections of the U. S. Geological Survey in Denver. Many of his specimens have come from out-

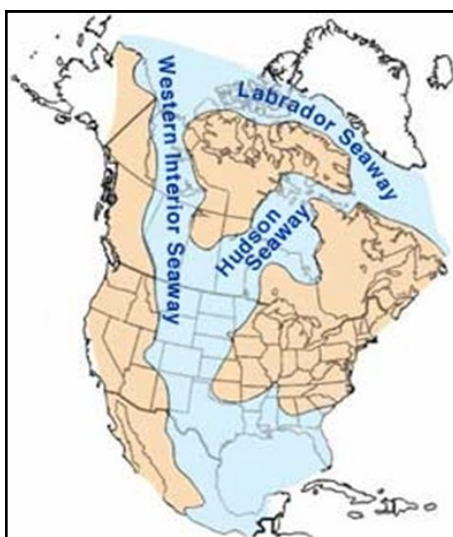


Fig. 1. Extent of Western Interior Seaway (WIS) about 100 Ma. Photo courtesy of Wikipedia [http://en.wikipedia.org/wiki/Western\\_Interior\\_Seaway](http://en.wikipedia.org/wiki/Western_Interior_Seaway)

crops east of Pueblo at a locality known as Baculite Mesa (Fig. 3).

An area in Colorado Springs known as "The Mesa" is underlain by the Pierre and outcrops may be observed along Uintah Street west of I-25. The shale is infamous as being rather unstable so that many houses in the area have shifted and suffered structural damage. Some of the drainages near The Mesa have been walked and collected and have produced some nice fossil ammonites. John Harrington, Jack Null and Oscar/Joyce Price have collected from either the Pierre or the Pierre-Fox Hills transition zone along Monument Creek in the center of Colorado Springs at a locality termed "Lingula Beach". They have a nice collection of small fossil vertebrates such as shark teeth.

The Pierre, and its western correlatives, is exposed at many localities in Colorado but most



Fig. 2. Fossiliferous concretion from the Pierre Shale. Photo courtesy of Wikipedia [http://en.wikipedia.org/wiki/Pierre\\_Shale](http://en.wikipedia.org/wiki/Pierre_Shale)



Fig. 3. Exposures of the Pierre Shale at Baculite Mesa near Pueblo, CO. Photo courtesy, and with

often in the basins, in the Book Cliffs, and on the flanks of mountain ranges (such as the Colorado Springs-Pueblo corridor). However, there is at least one Colorado locality where the Pierre is exposed along the crest of a high mountain range and that is at Nokhu Crags-Mt. Richthofen area near the summit of Cameron Pass west of Fort Collins at the headwaters of the Poudre River. This is somewhat of a "special locality" for me since in the summer of 1965 I was mapping the area as a student in Field Geology out of Colorado State University. Coming from the "layer cake geology" of Kansas I was used to observing the Pierre as a soft fissile black shale with concretions ---similar to what we see at Colorado Springs. However, the Pierre exposed at Nokhu Crags and along scenic Lake Agnes is standing on edge, and is quite hard! In fact, it is no longer a shale but a metamorphic rock termed hornfel (Fig. 4); a thermally altered shale! What happened?



Fig. 4. The Pierre Shale (originally a shale) at Nokhu Crags is now a hornfel. Notice the shale is no longer fissile (fine bedding), is more massive, and quite hard. The shale was near the intrusion of the Mt. Richthofen Stock and was thermally altered during emplacement. Hiking staff for scale. Photo by author.

The Nokhu Crags (12485 feet) and Mt. Richthofen (12940 feet) are part of the Never Summer Range (Fig. 5), a group of mountains near the northwest border of Rocky Mountain National Park. The range is approximately 10 miles in length and forms the crest of the Continental Divide; I

counted 10 peaks with an elevation exceeding 12000 feet. The northern boundary is established at Cameron Pass, an artificial boundary on Colorado Highway 14, and the mountains continue north as the Medicine Bow Range into Wyoming. The southern boundary is north of Granby as the range disappears in a jumble of mixed-age rocks. The Never Summers are different from most other northern and central Colorado mountains in that the core is not composed of old Precambrian rocks but of much younger igneous rocks, intrusions mostly around the age of 30 Ma.

As stated earlier, the Pierre was deposited as a marine layer in the WIS. During the Laramide Orogeny (uplift of the Colorado Rockies) the area now occupied by the Never Summer Range most likely was uplifted, and faulted, and then eroded. At a major fault, the Never Summer Thrust Fault, Precambrian rocks glided westward over the sedimentary section and the Pierre Shale (now the Nokhu Crags) was tilted upward. The entire area was then lifted again in a large block. New volcanism in the area began around 32 Ma and produced a thick layer, perhaps a mile, of volcanic flows and ashes (Larson, 2004). Then around 29 Ma the granodiorite and monzonite (intrusive igneous rocks rich in the feldspar, plagioclase) stock of Mt. Richthofen was emplaced (Larson, 2004). This hot magma then provided the "heat" for cooking the shale of the Pierre and the hornfel was formed. The entire area has been subjected to regional uplift in the last several million years and erosion and glaciations have produced the current dramatic landscape.

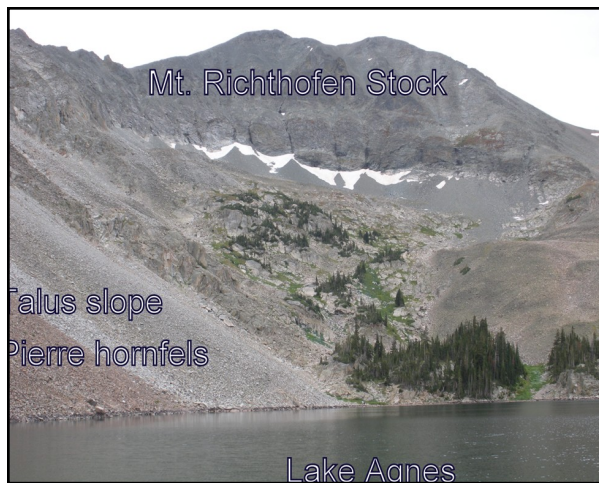


Fig. 6. Mt. Richthofen looking southeast from Lake Agnes. The hornfels of the Pierre Shale comprise the talus slope along the lake. The mountain is composed of the intruded igneous rocks of the Mt. Richthofen Stock. Photo by author.

I would like to suggest that if a moderate road trip interests you, consider Colorado Highway 14 from Teds Place (near Ft. Collins) westward to Walden. The road generally follows the Poudre River, a Blue Ribbon trout stream, and travels through some of the most spectacular scenery in Colorado. Immediately after leaving Teds Place the road plunges through the late Paleozoic and Mesozoic hog-

backs and then into the canyon of the River and its Precambrian rocks. The upper reaches of the canyon have been glaciated and visitors will notice a distinct difference between that U-shaped section and the lower V-shaped stream cut section. A glacial terminal moraine backs up Chambers Lake near the summit of Cameron Pass. One may also observe a thick section of



Fig. 5. The north end of the Never Summer Range taken from the summit of Diamond Peaks (11699'); looking south with Colorado 14 (unseen) in the valley between Diamond Peaks and the conifer forest. Photo by

upturned Mesozoic rocks, including the Pierre, near the Pass where they are exposed along the Never Summer Thrust fault; however, the shales have not been metamorphosed as at nearby Nokhu Crags.

After leaving the Pass the road transverses glacial sediments and finally reaches North Park, a large Laramide synclinal valley floored by Cenozoic gravels (but not glaciated).

Excellent views of the Crags and Mt. Richtofen may be observed from the highway near the Pass. However, for a much closer view, visit the Lake Agnes Scenic Area, part of the Colorado State Parks system. Park at the lot and hike a one mile trail (~400 feet elevation gain) to the Lake. The rewards are fantastic.

Three small postscripts may be appropriate. The summer of 1965 was the time of the great Denver floods. As a result, I spent many field camp days walking around in a rain slicker. For many years Mt. Richtofen, at 12940 feet, was the highest mountain that I had summited. The mountain was named, by Clarence King's 1870 survey team, for a quite well-known German scientist, Baron Ferdinand von Richthofen. Richthofen wrote a book entitled *The Natural System of Volcanic Rocks* and published early geologic maps of California and southeast Asia. He was an uncle of the World War I "Red Baron", Manfred von Richthofen.

*Dream as if you'll live forever. Live as if you'll die tomorrow.*

James Dean

## NEW MEMBER'S ORIENTATION WORKSHOP

April 24, 2010

In this workshop new members will learn where to look for gold and other minerals, find out how to own mineral land through the claim process, see the basic tools and equipment you will need in the field, and review basic prospecting techniques. Participants will see various gold recovery methods and practice the basics of gold panning.

An introduction to the geology, rocks, and minerals of the Pike Peak region is included. This workshop is expected to fill quickly, so register early! This is a joint program between the Colorado Springs Mineralogical Society (CSMS), the Lake George Gem and Mineral Club (LGGMC), and the Gold Prospectors of Colorado (GPOC).

**Time:** 9:00 a.m. to 1:00 p.m.  
**Place:** Western Museum of Mining and Industry  
1025 North Gate Road,  
Colorado Springs

**Fee:** **There is no fee for members of CSMS, LGGMC or GPC.**  
Bring a sack lunch to enjoy outdoors at the Museum's picnic tables after the workshop for more discussion of prospecting, mining, minerals, and adventure.

**Register:** Call the Western Museum of Mining and Industry at **719-488-0880** to register today. Only those registered may attend. Attendance is limited. Call the Museum today



## BOOK REVIEW

BY KEVIN WITTE

*Fossils Of The World* by V. Turek, J. Marek, J. Benes. This is an excellent reference book or textbook, with nearly 500 pages on fossils. The book begins with an overview of the origination of fossils. Subjects like ontogenesis (development of an individual from life to death), phylogenesis, palaeoecology, biostratigraphy, and many other 12+ letter words that my spell-checker says are wrong. Once you get past this, a systematic survey of fossil organisms and classification of fossil multicellular invertebrate animals was a little easier to comprehend (yes there were color pictures).

Some of my college biology kicked in and the information became more understandable. The remainder and majority of the reference book covered different fossils with pictures, descriptions and what time period they lived, for example Jurassic, Devonian, Cambrian... The reference book identified algae fossils from the Triassic to Echinodermata (sand dollars) of the Jurassic as well as many other fossils. The last chapter discussed preparation and conservation of fossils. So if you are interested in identifying some of your own fossils, or reading about ancient sharks like the 70 foot megalodon or the cave bear of the late Pleistocene this book may be for you. I found the most interesting part of the book was the chapter covering Mastodon and Mammoth teeth.

## FROM THE LIBRARY

BY FRANK ROSENBERG

We thank Joan Peterman for her recent donation of *The Uranium and Fluorescent Minerals* by H.C. Dake and we thank Roni Poteat for her recent donation of *Agates & Jaspers* by Ron Gibbs. We appreciate all book donations and encourage all CSMS members to take advantage of our fairly extensive inventory of reading material.

## THE SUBURBAN ROCKHOUND

My wife likes to shop and to be truthful, I don't. We always seem to be heading off to this mall or that mall or to some new strip center opening in the area. Even when we are on vacation she wants to check out some new strip mall with what could be just wonderful shops. I love my wife, so I say "OK" and off we go. As I said, I'm not a shopper so I used to hunt for places where I could sit and wait it out until she found this darling thing or that perfect thing.

That is until I became a "Suburban Rockhound". Now when she wants to go shopping, I say yes and that I'll just wait for her in the car. I tell her to take her time and have fun and not to worry about me. As soon as she leaves, I put on my vest, grab my bag, and hook my rock hammer to my hip. You see, it so happens that these new shopping areas have requirements for landscaping. Since grass is hard to maintain they use washed river rock. It's a great place to look for all sorts of rocks and there is no mud or water or bugs. My collection has grown and my wife thinks I'm a very patient and understanding husband.

## CSMS KUDOS CORNER

### MAJOR DONATION TO CSMS AND ITS APRIL 17<sup>TH</sup> SILENT AUCTION

Chip Carl and his family of Castle Rock, have decided to donate a number of pieces of lapidary equipment to our Lapidary Group, from the estate of the late Dale R. Corbin (see separate article on Dale R. Corbin). In addition, Chip has offered to use our Silent Auction as a means of disposing of his father-in-law's rock and mineral collection, which includes a considerable amount of material and supplies for lapidary work. Chip has also donated a considerable amount of special items created by his father-in-law. They include a large selection of canes/walking sticks, lamps, carvings, a chess table, a bench, wooden pens, as well as a variety of supplies. The Colorado Springs Mineralogical Society thanks Chip Carl and the entire family of the late Dale Corbin for this very generous donation.

### 2010 SCIENCE FAIR WINNER CHOSEN

On March 13, 2010 Roni Poteat, our new Membership Secretary, and President Ronald "Yam" Yamiolkoski had the great pleasure of judging student entries at the 2010 Pikes Peak Regional Science Fair for this year's CSMS Prizes.

And the winners were:

First Prize of \$125 and a certificate went to Sophia Schneider for her entry of "Reducing global warming? The effect of microorganisms on geologic sequestration." Sophia is an 8<sup>th</sup> grader at the North Middle School and her teacher's name is Greg Busby.

Second Prize of \$75 and a certificate went to Sara Kurko for her entry "The trickle down effect." Sara is a 7<sup>th</sup> grader at Pikes Peak Christian School and her teacher is Mr. Smith.

Third Prize of \$50 and a certificate went to Caitlin Heier for her entry "Underground water flow." Caitlin is an 8<sup>th</sup> grader at Russell Middle School.

In addition all awardees were offered a free one year membership in CSMS and were asked if they would be willing to present their Projects at an upcoming CSMS meeting.

### DALE RONNAL CORBIN

CSMS has received a tremendous gift from the estate of Dale Ronnal Corbin. The items donated to our Lapidary Group and to sell at our Silent Auction will benefit many of our members for years to come as they become more proficient in the artistry associated with our hobby. His love rocks and the work of the artisan will be spread out through the community to be enjoyed by members and friends. It is only fitting that we take a moment to know a little more about the man who unknowingly has become our benefactor.

Dale Ronnal Corbin was born October 7, 1924 near Hartville, Missouri. His family moved to Buhl, Idaho when he was five. His father had lost his canning factory and his herd of cattle in Missouri due to a poor economy.

Dale graduated from Buhl, Idaho High School when he was 17 years old and like many young men of his generation immediately joined the Marine Corps. He told them he was 18 and his mother signed the papers establishing him as being 18. By the time he was actually 18 he was fighting for his life in the South Pacific against the Japanese in World War II.

After the war, he received his B.A. using his GI benefits. He graduated from Southern Idaho College in Albion. Dale went on to teach social studies at the junior high level in Redwood City, California until health problems caused him to retire at the age of 52. His problems were caused by heavy exposure to radiation during the occupation of Nagasaki, Japan. Dale spent six months in Nagasaki as part of the occupation forces. The latter part of his life was spent pursuing a variety of hobbies including lapidary, wood carving, stained glass, and wood working. He was an artisan, soldier, teacher, father, grandfather, great grandfather, and like all of us a rock hound.

Dale Ronnal Corbin died April 24, 2008 in Castle Rock, Colorado at the age of 83. We thank his wife Anne Corbin and his family for their generous donations in his name.

## PRESIDENT'S CORNER

BY RON YAMIOLKOSKI,

There is so much to talk about it is hard to know where to start, so we'll do it sort of chronologically. But before I get into all of that, I want to thank Roni Poteat for a generous donation that she made to the Club back in December at the Annual Show. Roni gave us two copies of the book Agates and Jaspers by Ron Gibbs. One was for the Silent Auction and one was for our Library. The book itself is full of beautiful color photographs of the various types of agates and jaspers and the text discusses the chemical makeup and where they are found. If you are into lapidary or just love wonderful pictures of fantastic specimens, you will be getting in touch with Frank and Ellie Rosenberg to get this book out of our library and into your hands. Also don't forget to thank Roni when you see her.



Actually, that reminds me that our **Silent Auction** is coming up next month at the Mining Museum. As always, we will be needing donations from CSMS members so we have things to sell. If you don't have any rocks to part with, bring some baked goods for the bake sale or perhaps something that people would like to bid on. This Silent Auction will benefit our Groups (lapidary, faceting, fossil etc.) and the Pebble Pups and Juniors. The treasury is a little weak in this department so we need a good Silent Auction to help cover costs. Don't forget the date and time: March 17<sup>th</sup> from 10:00 AM until 2:00 PM

In case you were wondering, Maria Weisser our Social Committee Chair is planning on having coffee and milk available for those of you who buy some cookies or other treat at the Silent Auction and can't wait (that would be me). Maria is always looking for help so feel free to contact her at: [mariaweisser@yahoo.com](mailto:mariaweisser@yahoo.com).

Planning for the **Rock Fair at WMMI** starts this month. The Rock Fair will be June 26<sup>th</sup> and 27<sup>th</sup>. That's right, this year we are doing a two day event so we will need volunteers both days. We are planning a Pot Luck for Saturday night of the Rock Fair. Volunteers, vendors, and WMMI staff and WMMI volunteers would all be welcome to partake of the shared goodies. CSMS would contribute beverages and paper goods. Oh, the planning meeting will be at 6:30 PM in the Senior Center Lobby before our regular meeting. Any members interested in getting involved and helping out are invited.

As you may have noticed in the February Pick & Pack we already have some Field Trips planned. We need more so if you would like to

lead a Field Trip, just contact Yam our Field Trip Chair at: [ron.yamiolkoski@aeacom.com](mailto:ron.yamiolkoski@aeacom.com). Variety makes for a fun season of collecting, so think about some place that would be fun and you would like to share.

Steven Veatch, a member who keeps on giving back to the Club, is planning his annual Membership Orientation at the WMMI for Saturday, April 24<sup>th</sup>. If you are a new member and new to rock hounding, this is a great way to learn a little more about your new hobby. As soon as we have more details we will get them out to you and post them on our website.

I am still working on finding a place for our Annual Show, we would still like to do it later this year, but we want to find a suitable place that allows us to make some money for our Scholarship and other philanthropic activities. Having a show that wears out the members and does not make some money is not a good idea. I will keep you informed concerning my efforts.

On that note, we have been in contact with the RMFMS concerning our 2011 Regional Show. They have said that we can use the Rock Fair at WMMI as the cornerstone for our 2011 Show. This will change the date to June, put the Rock Fair at WMMI on the map, expand the Rock Fair to a three day event and be one of the first outdoor Regional Shows ever held. I have spoken to David Carroll, Executive Director of the WMMI and he has given it his enthusiastic green light. We will still need to pick a hotel to be the primary location for the regional meetings and meal functions, but that should not be too hard. We'll be providing more information on this as we move forward.

That's it for now but I do want to remind all of you to be careful out there as we enter the collecting season. Take it a bit easy at first. Because of the winter we have all been sitting around more than usual and it might take little more time to get back into condition for climbing and digging.

Take care,

Yam

## RMFMS PRESIDENT'S LETTER

BY BILL SMITH, RMFMS

It is hard to believe I am writing this article for the March Newsletter. The winter is flying by. Next month is our RMFMS Show and Convention in Wichita. If you have not yet mailed your delegates form to our credentials chairperson, Janet Smith, now is the time to send it in. If your club is not sending delegates then I am asking you to send in a proxy form. If you are not sure your State Director is coming to the convention you may list Gene Maggard and DeLane Cox to vote for your club. Then send it to your State Director who will hand deliver or mail the forms.

If members of your club would like to receive a copy of the RMFMS newsletter and haven an email address, you may send a list of those members with their email address to our editor, Betty Cain. We are working hard to put out a very informative newsletter and want as many members as possible to be informed of what is happening in the Federation.

I hope every club has sent their annual report to our Treasurer. We also need the information for the Directory. Kay Waterman has been hard at work updating the Directory which is full of information about the Federation. The Events Calendar has a year's worth of show, auction, and swap data. It also talks about our organization, Federation services, and the functions of our committees. If you see a committee position I have not filled, you can review the responsibility of the committee and give me a call. Our extensive Program Library has outstanding slide and DVD programs. The directory has a complete list with ordering instructions if you Program Chairman should need a program for a meeting. Are you planning a trip this summer to the new RMFMS area? The Directory lists all current clubs by state and city; telephone numbers are also listed. Just call, and I am sure a club member would be glad to take you to a collecting area or give you directions to one. This is just some of the important Federation information you will find in the Direc-

tory. Order yours today; see page 2 of this newsletter for ordering information.

I hope you are planning on attending the show in Wichita. I look forward to meeting and talking with you.

Until next month.

## A SPECIAL NOTICE FROM CSMS MEMBER DIANA WING, OWNER OF DICK'S ROCK SHOP

"As we have done for the past several years, we are offering a special sale for the entire month of April to all members of CSMS showing their 2010 membership card, A 20% DISCOUNT ON ANY IN STOCK ITEM IN THE STORE. There are several exceptions: This sale does not include books, coin pictures, wire, tools or equipment. On those items, we can offer a 10% discount. As an additional incentive, we will offer an additional 5% off on total purchases of \$100.00 during this special sale."

From Yam: "This is just another great reason to pat your 2010 dues. Being a CSMS member has its benefits."

## THE CSMS LAPIDARY GROUP IS UP AND RUNNING AGAIN

Under the leadership of Jennifer Bailey the CSMS Lapidary Group is up and running again. This popular group meets the 2nd Saturday of each month at Jennifer's home. Thanks to the recent donations by the estate of Dale R. Corbin we have some additional equipment for the group. Bob Germano has been checking the equipment over and doing some "tweaking" to make sure it works. Although the equipment has had some use it will allow more members to participate in the groups activities. One item is a 24" saw which still needs some blade cooling material before we start using it. We also received a 10" trim saw and a six wheel unit similar in configuration to the Group's Genie. The estate also provided CSMS with a number of tumblers. Because these items don't exactly work for the Lapidary Group. Because of time considerations, they will be offered at the April 17th Silent Auction to be held at the Western Museum of Mining & Industry.

Jennifer says you should bring your rocks to identify, slab, trim, and polish them. Make something fun and beautiful for yourself, your friends, and your family.

Please contact Jennifer directly for directions to her home.





## THE FIRST ANNUAL **CSMS SILENT AUCTION AND BAKE SALE AT WMMI**

Sponsored by the Colorado Springs Mineralogical  
Society

Saturday, April 17, 2010 - 10:00 AM until 2:00 PM

### JOIN THE FUN!

Lots of fun for the whole family. We will have an assortment of mineral specimens, slabs for lapidary work, fossils and finished pieces for folks to bid on. There will also be some special items of interest to capture your attention and earn a bid. Club members will be donating an assortment of home made goodies to purchase. Come see the Museum, have some fun bidding for some items and take home a few goodies to eat later.

**Admission: Standard WMMI Admissions apply. CSMS members and other WMMI supporting clubs admitted free.**

Western Museum of Mining & Industry

225 North Gate Boulevard

(I-25 Exit 156A)

Colorado Springs, Colorado

For additional information about CSMS or WMMI:

[www.csms.us](http://www.csms.us)

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

### Women in Mining

**Date:** March 13, 2010

In celebration of National Women's History Month, the Western Museum of Mining & Industry presents Women in Mining, an event that seeks to draw women of all ages to the museum for an educational and informative experience. Our featured presenter this year will be Cindy Brick (<http://www.cindybrick.com/>), author of Quilts of the Golden West: Mining the History of the Gold and Silver Rush. Edwardian era tea will be served at noon as part of the day's activities. The museum is located just off Interstate 25 at the Glenagele Exit 156 A. Lecture times: 11:00 a.m. & 2:00 p.m. Call (719) 488-0880 Customary Admissions apply. Reservations Requested to insure adequate tea & refreshments.

### Heritage Lecture: Geothermal Power

**Date:** April 8, 2010

To complement the museum's exhibit on energy production, Charles Visser, Laboratory Program Manager at the National Renewable Energy Laboratories, in Golden, CO, will be presenting on geothermal energy and related production for the Museum's Heritage Lecture Series. Heritage Lectures are free and open to the public. Lecture begins at 7:00 p.m. - Free and open to the public. Make reservations by calling 719-488-0880

### Keep What You Find Gold & Gemstone Panning

**Date:** 17-Apr-2010

Come down to the museum and learn how to pan for real gold and gemstones. Each visitor will be given a small bag of ore and gemstones to pan with at our indoor troughs. Best of all - you get to keep what you find!

Daily tours begin at 10:00 a.m. & 1:00 p.m. No reservations required.

### Second Annual Rock Fair at WMMI

**Date:** June 26, 2010 / 9:00AM—4:00PM  
& June 27, 2010 / 9:00AM—3:00PM

Lots of fun for the whole family. We will have gem, jewelry, mineral and fossil vendors; educational talks on rockhounding, geology and paleontology; demonstrations of goldpanning by the Gold Prospectors of Colorado; rock identification, a special Kid's Area; food vendors; the exhibits of the Museum, CSMS display cases; and WMMI equipment operation. WMMI has chosen Fair Saturday to run their Yellow Jacket Stamp Mill at 10:00AM and 1:00PM. Come to the Fair and see this awesome machine in action.

# Geologic Folio Red Rock Canyon Open Space Colorado Springs, Colorado

by

Ken Weissenburger, Sharon Milito, and Don Ellis

***295 pages ~ Large 8½" x 11" format ~ Profusely illustrated***

- ✦ 250 photographs
- ✦ 35 maps including maps of the best places in Red Rock Canyon to see geologic features of interest
- ✦ Over 65 drawings

## ***In depth treatment of:***

- ✦ Geologic mapping of the Pikes Peak Region and the West
- ✦ Geology of Red Rock Canyon
- ✦ The fossil record
- ✦ Red Rock Canyon Quarrying and mining
- ✦ Red Rock Canyon stone in historic buildings



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***Bookstore hours 11:00 A.M. - 4:00 P.M. Tuesday through Saturday***

# CSMS SCHOLARSHIP 2009

BY MICHAEL MITCHELL, CSM

Over the

holiday break I had the opportunity to go to Thailand as teaching assistants for a geophysical field camp funded by the Society of Exploration Geo-



physicists (SEG) Geoscientists Without Borders program. While the program was organized by Boise State University, our strong partnership with BSU enabled the department to send us along as well. The primary goal of this project was to pro-



vide geophysics students from the South Pacific, who might otherwise lack this type of valuable field experience, with the opportunity to learn how to collect, process, and interpret a wide variety of different geophysical datasets. During the first week of the field camp we collected a variety of different datasets including gravity, magnetics, GPR, DC resistivity, electromagnetics, reflection and refraction seismic, surface wave analysis, and passive seismic. The hope was to be able to use

this plethora of data to help characterize the basin in which Chiang Mai sits, assess the seismic hazards associated with a number of sites throughout the city, investigate the possibility of groundwater contamination from an old landfill, and search for the buried walls of ancient temples at Wiang Kum Kam and Wat Pan Sao. During the second week we helped guide the data processing, interpretation, and report writing process. Overall I would say that this was an amazingly rewarding and enriching experience. It is not everyday that you have the opportunity to work with 42 other geophysicists participants representing 7 countries and 13 different institutions. In closing we would like to thank the Geophysics department for their financial support and belief in our abilities. It is opportunities such as these that truly provide us with the opportunity to grow. Additional thanks to the SEG Geoscientists Without Borders program and our friends and colleagues at Boise State for enabling this project to progress from a mere idea to fruition.

For those interested in learning more about the project, the final report, presentation, and photos should be posted at <http://cgiss.boisestate.edu/gwb/>, under the "GWB Field Camp 2010" link.



# CSMS YOUTH GROUP TO STUDY ANCIENT EGYPTIAN ARTIFACTS

BY STEVEN W VEATCH, CSMS



On April 15, 2010, the Colorado Springs Mineralogical Society's Junior group (middle school to high school age) will be working with ancient Egyptian rocks and minerals that were fashioned into jewelry and ritual objects over 3,000 years ago. While working with these remarkable artifacts the students will learn Egypt was the first nation to be established in the history of mankind and that the Egyptian civilization lasted 3,000 years—longer than any other on the planet. When the teenage pharaoh Tutankhamen ruled Egypt, the pyramids of Giza had already been built well over 1,000 years earlier. When Cleopatra came to power, Tutankhamen had been a mummy for more than 1,000 years. While working with semi-precious gemstones, students will experience the mystery of ancient Egypt, hieroglyphs, scarabs, sphinxes, obelisks, and mummies.

The precious and semi-precious gemstones available to the ancient Egyptians were used for beads, pendants, amulets, inlays, scarabs, and other personal ornaments. The youth members will work with ancient artifacts fashioned from carnelian, blood-red garnet, and deep blue lapis lazuli. The group will review basic laboratory procedures and then examine each artifact under a microscope, learn to capture images through the microscope of each item, take measurements, and record their findings. Research methods will be reviewed, and then students will be given a specific research assignment. The research will be assembled and an original article will be written by the students on these artifacts. The article will be published. The Colorado Springs Mineralogical Society's Junior Group meets the third Thursday at the Colorado Springs Senior Center from 5:30 to 6:15 pm. Call Steven Veatch at 719-748-5010 for more information and a list of upcoming classes.



## THINGS TO DO FROM CSMS MEMBER PETE MODRESKI

**Sat., Apr. 3,** the Colorado School of Mines Geology Museum will hold a "Garage Sale" from 9 a.m. until 4 p.m. in the conference room across the hall from the Museum entrance, at 1310 Maple St. (southwest corner of 13th and Maple Streets), Golden, CO. "There will be a wide assortment of rocks and minerals by the flat, fossils, equipment, printed material, and miscellaneous items. Prices will drop by the hour." For further information please call 303-273-3815.

**Thurs., Apr. 8, Flatirons Mineral Club, Silent Auction;** 7:00 pm, West Boulder Senior Center, 909 Arapahoe Ave. (just West of the Main Boulder Public Library), Boulder CO; all are welcome. (These mineral club silent auctions are a lot of fun and tend to be a good place to pick up rock, mineral, and fossil specimens at very reasonable prices.)

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**Sun., Apr. 18, Earth Day Geology-Nature Hike** on Green Mountain, Lakewood, CO (April 22 is the actual date of the 40th annual Earth Day). Led by USGS geologist Pete Modreski; all are welcome, no charge. Meet at the Alameda Parkway trailhead (opposite W. Florida Dr., about 1.7 miles west of Union Blvd.) to at 9 a.m. Bad weather alternate date will be April 25; to confirm the date or for more info, call 303-202-4766 or email pmodreski@usgs.gov. Be prepared for an approx. 4-mile round trip hike, climbing and descending about 600 feet to the summit and return; we hope to view petrified logs and other geologic and natural history features on Green Mountain.

**Fri-Sat-Sun., Apr. 23-25, Spring Colorado Mineral and Fossil Show,** at the Holiday Inn -- Denver Central, 4849 Bannock St. (Frontage road west side of I-25, just north of I-70); free admission and parking, 10 a.m.–6 p.m. Fri. & Sat., 10 a.m.–5 p.m. Sunday; many dealers with a variety of minerals, fossils, gems & jewelry.

**Wed., Apr. 28, one event that I missed putting in my lecture calendar last time: CSI: La Brea: Murder & Mayhem on Wilshire Blvd.,** lecture by Dr. Sue Ware at the University of Colorado Natural History Museum, CU campus, Boulder. <http://cumuseum.colorado.edu/index.html>

**Sat., May 1: first Dinosaur Discovery Day** public tour day of the year, at Dinosaur Ridge, Morrison. This will be Cub Scout/Boy Scout Day; geology exhibits and hands-on dinosaur activities at the Visitor Center; expert guides at stops on the Dinosaur Ridge Trail. Activities

[Go to page 12 for more from Pete.](#)

## ASK A GEOLOGIST

BY MIKE NELSON, CSMS

Billy writes: *We are studying rocks and minerals in our grade school in Texas. My teacher is having problems trying to explain how you can identify minerals by looking at their properties. Can you please help me? I want to be a geologist when I grow up.*

Billy, it is often difficult for the beginning rockhound to identify minerals beyond some of the very common forms such as quartz or pyrite. However, I will give a try at explaining how a geologist uses physical properties to identify minerals. Most of these properties may be determined using some very simple tools that will be explained below. Because of the length of this article I will do Part I this month and Part II next month

Most of us started out identifying minerals by examining color, an important physical property. However, as noted below, color may be singularly important for some minerals (think of the yellow color of sulfur) but non-diagnostic for many others (such as multicolored calcite). This article is an attempt to provide Billy and CSMS members with descriptive terms needed to identify common minerals.

First of all, perhaps I should define the term "mineral" in a geological sense since we often hear the term used in other ways, such as "vitamins and minerals". This latter usage most often refers to a single element in your cereal such as "zinc". Geologists define a mineral as a substance that forms naturally, is a crystalline solid, has a definite chemical composition, and forms by geologic processes. In the "olden days", that is when I took a course in Mineralogy, a mineral had to be "inorganic", and the substance did not include organically derived compounds. However, in 1995 the International Mineralogical Association changed the definition of "mineral" to include biogenic substances (Nickel, 1995). The Association now recognizes an entire new group of minerals including hydrocarbons (such as Jet, Amber, and Copal), formates, oxalates, citrates, mellitates, acetates, and cyanates. Some geologists would prefer to call this entire new group the "mineraloids" and include such other compounds as opal (no crystal structure), obsidian (no crystal structure, an amorphous glass) and pearl. The average CSMS member likely will not encounter such exotic species other than some hydrocarbons, obsidian, opal, and pearl.

Then there is the question about synthetically derived "minerals". These specimens are produced in the laboratory and "do not result from geologic processes". I am not a mineralogist and certainly find it difficult to distinguish, for example, between synthetic ruby and natural ruby if the latter has been heat treated to eliminate the rutile inclusions. The best distinguishing factor, only seen under a gem scope, is the thin curved lines present in the synthetic gems. There are present since the synthetic stones "grow" by deposition of molten material. I guess it is buyer beware when buying gems

from a web site or from a non-jeweler. I would love to see a Pick & Pack article written by a knowledgeable member on this entire area of synthetic gems.

In order to identify minerals, geologists and others examine the physical properties exhibited by specimens. In some cases, only a single physical property would be enough to identify a mineral; however, most identification takes additional observations.

The first property that people notice about a mineral is its color, the most obvious physical property but unfortunately not the best mechanism for identification. Some colors in minerals are caused by small amounts of impurities while others have atoms that absorb all wavelengths except perhaps one. The atoms in olivine absorb all the colors except green and therefore all "common olivine" is green in color. Actually, the color of a mineral is determined by some rather complicated sorts of "things" that are beyond the scope of this project. What we do know is that some minerals may be identified only by color, for example, the copper mineral azurite is deep blue while the copper mineral malachite is bright green. However, small amounts of impurities can impart a variety of colors in many minerals. Calcite occurs in virtually every color of the rainbow as does quartz and fluorite (Fig. 1).



Fig. 1. A few examples of colored varieties of quartz. Photos courtesy of Caltech.

The streak of a mineral, that is the pulverized powder, is sometimes of a different color than the primary color of the mineral and is, in fact, more consistent for the specific mineral. The streak is obtained by rubbing a mineral across a piece of unglazed porcelain (I use the back of a small bathroom tile) (Fig. 2). Unfortunately, minerals that do not readily allow the passage of light, the opaque minerals, often have a black streak while the translucent minerals leave a white streak. The many colors of quartz always display a white streak. The iron oxides hematite and magnetite may be similar in color; however, hematite has a red streak while the streak of magnetite is black (Fig. 3).



Fig. 2. Determining the streak of a mineral. Photo courtesy of California State University, Pomona.

Luster refers to the manner in which a mineral reflects light. Minerals with a metallic luster look like a piece of fresh metal, or a piece of shiny pyrite. A non-metallic luster is certainly more common and includes several subdivisions. Dia-



Fig. 3. Two different colored specimens of hematite; however, both have a reddish streak. Photo courtesy of Georgia Perimeter College

monds have an adamantine or brilliant luster. Something like quartz, with the luster of broken glass, is vitreous or glassy. Resinous minerals have a subdued appearance (like "resin") and sulfur is a good example. Silky minerals have the appearance of satin, such as chrysotile (asbestos). Earthy minerals have the appearance of soil and the clay mineral kaolinite comes to mind as a good example. The surface of fibrous minerals appears like "fibers". At times it is a personal judgment call as to the correct luster and this property must be used in conjunction with others.

Hardness measures a mineral's resistance to scratching or abrasion. Examine any mineral description and one will see an Arabic numeral (1-10) associated with hardness. These numbers refer to a standard called Mohs' Scale of Hardness (named after a German geologist, Friedrich Mohs). The standard is a relative, not a linear, scale. For example, corundum is a 9 on the relative scale while diamond is a 10. On an absolute scale if corundum is assigned a 9 then diamond would be about 40+. Diamond is much, much harder than corundum and is the hardest naturally occurring substance known.

The Moh's Scale uses common minerals and materials:

1. Talc; May be scratched quite easily by a fingernail
2. Gypsum; May be scratched by a fingernail 2.5
- 2.5 Fingernail
3. Calcite; May be scratched by a copper penny 3.5
- 3.5 Copper penny
4. Fluorite; May be easily scratched with a knife blade
5. Apatite; Scratched with a knife blade 5.5
- 5.5 Knife blade; window glass
6. Feldspar; May scratch glass with difficulty 6.5
- 6.5 Porcelain streak plate

7. Quartz; Scratches glass easily
8. Topaz; Scratches glass with ease
9. Corundum; Cuts glass
10. Diamond; Cuts glass

A geologist trying to identify the hardness of a mineral can make an educated guess using some common materials—fingernail, knife, streak plate, small piece of glass, a penny, even a tempered steel file at 7.5. Few common minerals are harder than quartz. Some professionals use a purchased hardness set looking something like a nail with specific hardness points (Fig. 4).

Upon hearing the name quartz, most people immediately think of the crystal form—long, slender six sided crystals with a terminated point. The reason behind this recognition is that the atoms in quartz are arranged in an ordered geometric pattern termed a crystal structure and that pattern will always be found for a specific mineral, that is, every crystal of quartz will



Fig. 4. Mineral hardness points. Photo courtesy of Mineralab.com.

have the same ordered internal arrangement of atoms. The consequences of this ordered crystalline structure is that all crystals of the same mineral look similar. This was discovered by a Danish scientist, Nicolas Steno, in 1669 and is called the **Law of Constancy of Interfacial Angles** - angles between corresponding crystal faces of the same mineral have the same angle. So, no matter where the quartz crystal was collected, the angles between the faces are consistent and therefore, they have an identical look (Fig. 5)

It must be realized, however, that not all minerals will display a crystal structure. Although the mineral structure of quartz is recognizable to most CSMS members, the majority of the quartz they will find in the field will not show the structure! Good crystals grow in environments where they may form without interference from their neighbors. Nondescript masses of a mineral are the norm rather than the crystals that we all like to collect. Collecting localities such as near Hot Springs, Arkansas are rare. However, crystal structure may be very useful in identification, and may be apparent in many minerals. Besides the quartz prisms, halite occurs in cubes

(helpful to distinguish from calcite) as does galena (helpful to distinguish from some iron minerals).

As with mineral color, mineral crystallography is extremely complicated and entire university courses are devoted to the subject.

This concludes Part I with Part II to follow next month.

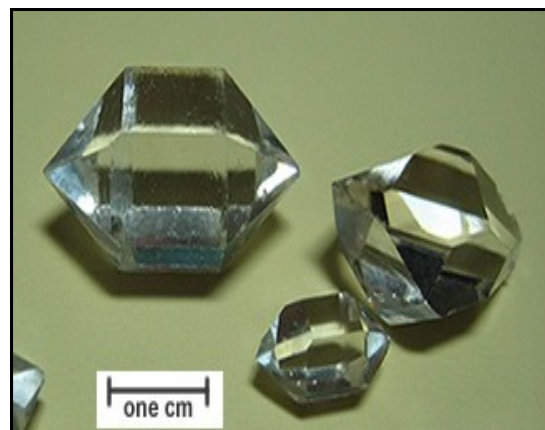


Fig. 5. Herkimer Diamonds, actually double terminated quartz crystals from New York, illustrating the Law of Constancy of Interfacial Angles. The angles where the crystal faces meet are identical to quartz crystals collected from Pikes Peak or from Mt. Antero. Photo courtesy

#### REFERENCES CITED

Nickel, E. H., 1995, *The Definition of a Mineral: The Canadian Mineralogist*, v. 33, pp. 689-690.

## CSMS FIELD TRIPS

Although it is early in the season, some Field Trips for 2010 have already been set. As usual, check the CSMS website ([www.csms.us](http://www.csms.us)) for the latest list of Field Trips. Also, if you have an idea about a field trip or would like to lead a field trip, contact Yam our Field Trip Chair at [ron.yamiolkoski@aecom.com](mailto:ron.yamiolkoski@aecom.com).

April 17

**North Table Mountain Zeolites**, Flatirons Mineral Club (This is a reciprocal trip with the Boulder Club), Dennis Gertenbach, [gertenbach@comcast.net](mailto:gertenbach@comcast.net)

April 24

**Holcim Cement Quarry**, Bob Germano, [Gliders1@hotmail.com](mailto:Gliders1@hotmail.com)

July 10

**April Fools Claim**, John Casto, [Jcasto@fvs.edu](mailto:Jcasto@fvs.edu)

## FIELD TRIP—THE MUSICAL

BY MIKE WHEAT

He had spent many years digging in the nearby mountains. He'd lost count of the number of holes he'd dug, and then re-filled, looking for the perfect amazonite and smoky quartz cluster, sky blue topaz crystals, or a handsome spray of goethite blades. Oh, he had found a few nice crystals good enough for his collection, but nothing spectacular. Most of what he'd dug up was more suitable for grab bags or silent auctions for kids. He longed to discover that elusive pocket, full of crystals with glassy surfaces and interiors and with classic shape and color. If they were a bit on the large size, that would be nice too. As he watched the snow fall outside his window, he sang "The Impossible Dream" from "Man of La Mancha". A seed of hope was planted.

Winter passed into Spring and the days grew warmer. His eagerness grew along with them and soon peaked into unbridled enthusiasm. He thought of the treks soon to come and sang "Climb Every Mountain" from "The Sound of Music" with all the optimism he could muster.

The day finally came when the weather was just right. He checked his equipment, hopped into his Jeep and headed for higher elevations. He went to a new location he'd heard about, but when he arrived his face fell. There was evidence of previous digging everywhere. The place looked like a recent battlefield. He shrugged his shoulders and moved on beyond the torn up earth.

The sun grew hot and his strength was flagging. He went to a nearby tree and sat down in the cool shade. His eyes grew heavy and his head drooped to his chest. As he began to

snooze, he felt a sharp pain coming from an area near his back pocket. He moved over, looked down and discovered a partially broken smoky. He looked around for signs of previous digging, but found none. With mounting excitement, he began to dig. Within two feet, he hit a pegmatite. Following it carefully, he exposed a large pocket full of beautiful crystals. His every dream had come true. With tears of joy welling in his eyes, he sang "Stranger In Paradise" from "Kismet".

## PETE MODRESKI CONTINUED

suitable for scouts to earn the belt loop, academic pin and the Geology Merit Badge. Public is welcome (free). 10 am – 3 pm. Scouts must register. See [www.dinoridge.org](http://www.dinoridge.org) or call 303-697-3466 for more information.

**Sat., May 8; Colorado Mineral Society Silent Auction**, Holy Shepherd Lutheran Church, 920 Kipling St., Lakewood; 11 a.m. to 3 p.m. All are welcome.

**Sat., May 15, Friends of Mineralogy Silent Auction**, to be held at Clement Community Center, 1580 Yarrow St. (near Colfax & Wadsworth), Lakewood, noon to 3 p.m. All welcome!

**Fri-Sat., June 25-26**, some may be interested in a "South Park Symposium" on history and natural resources of South Park, to be held at Fairplay RE-2 School these two days. Talks will include local history and historic preservation, "Sheepherding", "South Park Salt Works 1862-1883", "Miner's Partner--the Burro", "Evolution of Colorado water use and laws", and an afternoon field trip to see Ice Age landforms in South Park. One can register for a half day, full day, or both days; complete 2-day registration is just \$15. I am not able to find a website with info about this event online, but if you email me ([pmodreski@usgs.gov](mailto:pmodreski@usgs.gov)) I will forward you an e-copy of the program & registration flier.

**Sat.-Sun., June 26-27, "Rock Fair"** at the Western Museum of Mining & Industry, Colorado Springs, cosponsored by the Colorado Springs Mineralogical Society; a mini-mineral show with related activities, in tents outside the Museum. For more info see <http://wmmi.org/>.

**Aug. 12-15, "Contin-Tail"** mineral show and swap, Rodeo Grounds, Buena Vista, CO.

**Aug 20-22, Lake George Gem & Mineral Show**, Lake George, CO. For more info see <http://www.lggmclub.org/>.

**Sep. 11-12, Creede, Colorado, Mineral Field Symposium**, to be held in Creede, CO, sponsored by the Colorado Chapter, Friends of Mineralogy, and the Colorado School of Mines Geology Museum; a two-day symposium with lectures and field trips. More information will be available soon.

**Sep. 17-18, Denver Gem and Mineral Show**, Denver Merchandise Mart. For more info see <http://www.denvermineralshow.com/>. The theme of the 2010 show will be "The Creede Mining District".

**Sep 15-19, Colorado Mineral and Fossil Show**, Holiday Inn - Denver Central, 4849 Bannock St.

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
	1	2	3	4	5	6
<b>MARCH 2010 — CSMS CALENDAR</b>						
7	8	9 7p Micromounts Group	10	11 7p Board Meeting	12	13 12n-4p Lapidary Group
14 Daylight Savings Time Begins	15	16 7p Fossil Study Group	17 St. Patrick's Day	18 5:15p Junior Group 6:30p Pebble Pups 6:30p Rock Fair Mtg. 7:30p Gen Assembly	19	20 12n Jewelry Group First Day of Spring
	22	23	24	25 7p Crystal Study Group 7p Faceting Group	26	27 10a-4p Micromounts Group !NEW!
28 Palm Sunday	29	30 Passover	31	4/1 7p Board Meeting	4/2 Good Friday	4/3

#### REFRESHMENTS FOR GENERAL ASSEMBLY MEETINGS

Feb—Crystal  
May—Jewelry  
Aug—Picnic

Mar—Faceting  
June—Lapidary  
Sept—Projects

April—Fossil  
July—Micromounts  
Oct—Board

Area Code 719

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## Locations

**Board Meeting:** 1st Thursday @ 7:00p. Senior Center, David Olsen: 495-8720

**Crystal Study Group:** 4th Thursday of the month @ 7:00p, Senior Center; Kerry Burroughs: 634-4576

**Faceting Group:** 4th Thursday @ 7:00p, Senior Center, Paul Berry, 578-5466

**Fossil Study Group:** 3rd Tuesday @ 7:00p every other month, Senior Center, Mike Nelson, 522-1608

**Jewelry Group:** 3rd Saturday @ 12:00p, 15610 Alta Plaza Circle, Peyton, Bill Arnson, 749-2328

**Juniors & Pebble Pups:** 3rd Thursday @ 5:15p & 6:30p, Senior Center, Steven Veatch, 748-5010

**Lapidary Group:** 2nd Saturday @ 12:00p, 6570 Ramrod Road, Colorado Springs,, Jennifer Bailey, 638-8169

**Micromounts Group:** 2nd Tuesday @ 7:00p, 1514 North Hancock, Phil McCollum, acc@friei.com, Moyra Lyne, 442-2673

**Project Group:** Meeting time TBD, Ron "Yam" Yamiolkoski

# FEBRUARY 18, 2010 GENERAL ASSEMBLY MINUTE

BY JENNIFER BEISEL, CSMS ACTING SECRETARY

1930 - Call meeting to order – Ronald “Yam” Yamiolkoski.

Salute to the Flag.

Approval of December 17th, 2009 Minutes as they appeared in Pick & Pack. **Since there was not a January Pick & Pack and the February issue isn't out yet, this item will be tabled until the next meeting.**

Treasurers Report – Anne Proctor / Al Zelenak, Treasurer – Anne is waiting for the audit to take place (after tax season) to fully transfer duties.

Introduction of New Members; Al Masker, Paul Summers, Francis & Martin Ward, Lisa Leland,

Introduction of Guests: Steve Choders,

**The President has made the following appointments for 2010:** Field Trip Chair – Ronald “Yam” Yamiolkoski, Historian – Brenda Hawley, Librarians – Frank and Ellie Rosenberg, Scholarship Chair – Mike Nelson, Science Fair Chairs – Ronald “Yam” Yamiolkoski and Bob Germano, Publicity Chair – Mike Christianson, Store Keeper – Ann Proctor, Social Committee Chair – Maria Weisser, Rock Fair Chair – Ronald “Yam” Yamiolkoski, Annual Show Chair – Ronald “Yam” Yamiolkoski, Web Master – Allen Tyson, Camera Group – Vacant, Crystal Group Chair – Kerry Burroughs, Faceting Group Chair – Paul Berry, Fossil Group Chair – Mike Nelson, Jewelry Group Chair – Bill Arnson, Lapidary Group Chair – Jennifer Bailey, Micro-Mounts Group Chair – Phil McCollum, Project Group – Ronald “Yam” Yamiolkoski, and Pebble Pups/Juniors – Steven Veatch.

**Group Chairs update:** Crystal Study Group – Kerry Burroughs

4<sup>th</sup> Thursday of the month at 7:00 PM at the Senior Center (craft room)

Fossil Study Group – Mike Nelson

3<sup>rd</sup> Tuesday of every other month (January, March etc.) at 7:00 PM at the Senior Center

Micromount Group – Phil McCollum (Moyra Lyne) 2<sup>nd</sup> Tuesday of the month at 7:00 PM at the Senior Center and the 3<sup>rd</sup> Saturday of each month (except December and June thru August) from 10:00 AM to 4:00 PM at 3609 Windsor Avenue in Colorado Springs, CO.

Faceting Group – Paul Berry

4<sup>th</sup> Thursday of the month at 7:00 PM at the Senior Center

Lapidary Group – Jennifer Bailey 2<sup>nd</sup> Saturday of the month from 12:00 PM until 4:00 PM 6570 Ramrod Road, Colorado Springs, CO

Jewelry Group – Bill Arnson 3<sup>rd</sup> Saturday of the month from 12:00 PM until 4:00 PM at Bill Arnson's house – 1560 Alta Plaza Circle, Peyton, CO

-Wire wrap at Bill's house Saturday

Pebble Pups/Juniors – Steven Veatch

3<sup>rd</sup> Tuesday of the month at the Senior Center. Juniors meet at 5:15 PM and Pebble Pups meet at 6:30 PM

Having a “Go-for-the-Green” field trip (meet at Jenkins Middle School) – going to the peridot claim, need help

The dates have been set for June 26 & 27, 2010. In the Rock & Gem magazine

Presidents Report (Yam): We are looking for a new Membership Chair and Editor. Allen and Tracey Yamiolkoski are filling the positions on a temporary basis but would prefer to have someone else takeover the positions.

As you know, the RMFMS has selected CSMS to host their Annual Show in 2011. We were going to do it at the Phil Long Center, but we are in the process of cancelling that contract for reasons known to those who attended the Show. The Board will be working on this issue and will resolve the problem for the 2010 and 2011 Show by April, so we can report to the RMFMS at their annual meeting in Wichita.

The next big event is our Annual Spring Silent Auction and Bake Sale, April 17. This year it will be held at the WMMI (free advertising) from 10:00 AM until 2:00 PM. We will need donations for the Silent Auction and the Bake Sale as well as volunteers to make sure it all gets done. Since all members of CSMS get in to the WMMI for free, all you need to do is bring you membership card, donations and money.

The Board in trying to reduce costs decided to reconsider an action taken in 2008 to raise the amount of the prizes awarded by CSMS at the Science Fair. As you all know we do not sponsor the Science Fair, but have for a considerable number of years provided prizes to students whose projects relate to the Geology. In looking over the amounts of awards given by other groups who are considered sponsors, we have found that CSMS has the some of the most significant monetary prizes awarded. The Board felt that we may have been too generous in our previous action and as a result passed a motion to reduce the amounts at the January 7<sup>th</sup> Board Meeting. Since this is a change in our By-Laws the action must come before the General Assembly for their Approval Therefore:

**Vice President Dave Olsen moved: “Be it resolved that Article VII – AWARDS & SCHOLARSHIPS, SECTION 2 – Regional Science Award or the CSMS By-Laws be changed to read in part: First place will receive \$125.00 and a certificate, second place will receive \$75.00 and a certificate, and third place will receive \$50.00 and a certificate.”**

The previous language was: “As resolved on April 18, 2008, first place will receive \$250.00, \$175.00 for second place. And \$75.00 for third place.” Seconded by Roger Pittman

Discussion: Ray suggested that the by-laws shouldn't even state the amount just that we have the prizes. Moved to amend to remove the amounts.

**“Be it resolved that Article VII – AWARDS & SCHOLARSHIPS, SECTION 2 – Regional Science Award or the CSMS By-Laws be changed to read in part: First, second, and third place will receive a monetary award and a certificate. The amounts will be determined by the board annually.”**

Lauren Lowe Seconded the amendment.

Further discussion: Are we going to be recognized as a sponsor? Probably not this year. The club wants to encourage kids to become more involved in earth science.

Continue to give out prizes but the amounts will not be included but determined by the board annually. All in favor, none against. Motion passed.

Vice Presidents Report (Dave Olsen): No report at this time.

Secretary's Report (Jennifer Beisel): No report at this time.

Members-at-Large Report (Sharon Holte & Bob Germano): No report at this time

Annual Show Report – Ronald Yamiolkoski

December 5<sup>th</sup> & 6<sup>th</sup> at the Phil Long Center. Although we haven't received a bill we'll be sending them a letter along with a check for the estimated cost minus the down payment.

The Pikes Peak Gem & Mineral Show just concluded was not a financial success. Problems at the Phil Long Center, the

MARCH 2010



### Our Staff...

Tracey Yamiolkoski Editor

CSMS Members Reporters

We encourage everyone to submit articles, photos, illustrations or observations.

Share your experiences, trials and tribulations, your new finds, or simply your experience at our last field trip.

The ability to write well is NOT a requirement. We will fix the grammar while keeping the author's voice, style, and work intact.

Handwrite it, type it, or email it. Format does not matter. All submissions are welcomed.

DEADLINE for items to be included is the Saturday after the General Assembly every month.

To submit an item, please use the following:

For hardcopy photos or articles, mail to the address below or bring them to the General Assembly Meeting. All hardcopy photos remain the property of the submitter and will be returned. Electronic photos should be submitted at resolutions above 200 dpi in TIF, BMP, JPG, or PIC format.

All articles not shown with an author are provided by the Editor.

Mail or email to:  
tracey.gleason@gmail.com or  
Info@csms.us

PO Box 2  
Colorado Springs, CO 80901  
Phone: (719) 358-9627

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weather, and the economy all had an impact on what was otherwise a great show. Yam personally wants to thank all of the folks who volunteered in spite of the weather and noise issues to help out over the three day effort. I received a lot of positive comments about our club and its members on the Vendor Surveys that were returned to me. As soon as we have all of the costs in, we will advise the membership of the financial impact of the Show.

Field Trip Report – Yam: I will be contacting all of our Filed Trip leaders from last year as well as some folks who said they would lead a Field Trip during the next month. I will have a list on the Website before the next meeting.

Membership Report : Dues for 2010 are past due. Please make sure you provide complete updated information on your application form so that our database is accurate. Dues can be paid to Allen Yamiolkoski if you want to pay tonight. Allen also has copies of the Application Form so you can do your update.

Pick & Pack: There February issue of the Pick & Pack has been delayed. A new computer and software were necessary to prepare the newsletter and to update the database for distribution. **Final reminders:** Make sure you put the Silent Auction and Bake Sale on your calendar; Make sure that you pay your dues; Don't forget we are still looking for permanent replacements for the Editor and the Membership Chair as well as someone to serve as Hospitality Chair and help out with the Science Fair.

Steve Jorgensen - Looking for donations for 4-H. Contact information:

[djsirkymtnhi@yahoo.com](mailto:djsirkymtnhi@yahoo.com); 495-7973

8:08 Close Meeting before speaker

Dave Olsen will now introduce tonight's speaker: Jerry Suchan.

## CLASSIFIEDS . . .

NOTICE—Items listed for sale in the Pick & Pack are displayed only as an informational service to our members and advertisers. CSMS and/or the Pick & Pack do not promote nor warranty any item displayed. The sellers and buyers are responsible for the condition and ownership of any item shown.

**CSMS T-Shirts, Badges, and Pins** are available for sale at each meeting. See Store Keeper, Ann Proctor.

### Have You Picked Up Your Membership Award Pin?

If you celebrated a CSMS anniversary in 2007, 2008 or 2009, your year pin award is available from the Membership Secretary, Bill Cain. Last call for 2007 pins.

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## Joining the Colorado Springs Mineralogical Society (CSMS)

General Assembly meetings are held the third (3rd) Thursday of each month, except January & August, beginning at 7:30 p.m. at the Colorado Springs Senior Center, 1514 North Hancock Blvd., Colorado Springs, CO. **Visitors are always welcome.**

CSMS also offers Satellite Group meetings that allow more focused attention in specific areas of our members' interests. Our current Satellite Groups consist of the following: Crystal Study Group, Faceting Group, Fossil Group, Jewelry Group, Lapidary Group, Micromounts Group, and Pebble Pups/Juniors. For details on Satellite Group meetings, see page 13.

Yearly dues include 10 issues of the *PICK&PACK*, all field trips (additional fees may be required on some field trips, and members are responsible for all transportation to and from), participation in all Satellite Groups (some groups may request additional fees to help cover resource costs), free admission to the *Western Museum of Mining & Industry*, a year of learning and enjoyment, plus a lifetime of memories.

Individuals—\$20

Family—\$30

Juniors—\$5

If you are interested in joining CSMS or would like more information, we encourage you to attend our next General Assembly meeting or visit our web site: [www.csms.us](http://www.csms.us).