



## Friends of Mineralogy, Colorado Chapter Newsletter – November 2008

Next meeting **November 13, 2008** (*Board meeting 6:45-7:30*)

### **FRIENDS OF MINERALOGY PROGRAM FOR NOVEMBER**

#### **THE CRIPPLE CREEK MINING DISTRICT**

Presented by: Dr. Carl R. Carnein

Carl R. (Bob) Carnein has degrees in geology and glaciology from The Ohio State University, where he received his Ph.D. in 1976. He taught undergraduate courses in geology for 37 years, first at Waynesburg College and then at Lock Haven University, both of which are in Pennsylvania. From 1971 through 1988, he taught summer field courses for geology majors out of Waynesburg College's field station in Florissant, CO. He met his wife of 25 years in Florissant, and they bought a house near Divide and moved there in 2007. Bob's main interests are mineralogy, petrology, and structural geology, but he has taught most of the courses offered in a typical undergraduate geology program. He has collected minerals since about 1954.

The Cripple Creek/Victor area, in Teller County, Colorado, has yielded over 25 million ounces of gold in a history stretching back to 1891. This makes it the number one gold producing district in Colorado and number 2 or 3 in the United States. Although the district was nearly moribund from the 1960s through the late 1970s, it currently produces over 300,000 ounces of gold per year from low grade ores that benefit from large scale mining methods that weren't available in its heyday.

The Cripple Creek area hosts over 120 minerals, most of which are not of collector interest but a few of which (e.g. melonite, sylvanite, calaverite) occur in world-class specimens that grace many first rate public and private collections. Although most of these minerals are not spectacular, they are sought after by those who value rare and unusual Colorado minerals. Thanks to a peculiar combination of geologic events, the deposit's fame rests not on the native metals typical of most gold deposits but on the occurrence of gold and silver tellurides.

Dr. Carnein's talk will cover the history, geology, and mineralogy of the district. Specimens of some of the minerals for which the deposit is famous, along with typical host rocks, will be available for our inspection. FM members might be interested in reading an article on the Cripple Creek Mining District that Dr. Carnein co-wrote with Paul Bartos for *The Mineralogical Record*, March-April 2005, Volume 36, Number 2.

**2008 FMCC Board of Directors:**

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**CSM Museum Musings**

*"Colorado School of Mines Geology Museum Posts New Website  
Museum Director Bruce Geller recently announced that the Museum's new website is now on line at <http://geology.mines.edu/museum/> The website looks great and has lots of information about the history, exhibits and services of the museum."*

**Pikes Peak Historical Society Museum  
Florissant, CO.**

By Andy Weinzapfel

The mineral, rock, and fossil collection of the Pikes Peak Historical Society (PPHS) Museum in Florissant, CO. is arguably the best showcase outside the Denver area of the incredible geologic diversity of "Pikes Peak backcountry". The collection, established in 2005 and still growing today, is composed of specimens from 30 donors covering Teller, Park, Fremont, Chaffee, and Douglas counties.

The project was the brainchild of the Lake George Gem and Mineral Club (LGGMC). Club members, local miners, and other interested parties were challenged to donate high quality specimens from the region. Others have generously supported the collection. For example, the Greater Denver Gem and Mineral Council funded two oak museum display cases.

Both PPHS and LGGMC have a common mission to educate the public. Many citizens, even local residents, are unaware of the tremendous mineral endowment of the region. A significant portion of visitors every year are international, coming from countries as far away as Australia.

Some noteworthy parts of the collection include: 1) Rich Fretterd's 4 foot long, 439 lb. smoky quartz crystal from the nearby Lake George intrusive; 2) a plethora of rock and mineral specimens from the Cripple Creek district, donated by Cripple Creek & Victor Gold Mining Company; 3) fossils from the 34 million year old Florissant Formation, donated by a local family, the Claires.

Summer hours for the free museum are 10:00AM- 4:00PM Mon, Wed, Thurs, Fri, and Sat. The museum is located a few hundred feet south of the intersection of Teller CR 1 and highway 24 in Florissant.

## Mine Donation Keeps Big Crystal At Home

According to a May 28 article in *The Pikes Peak Courier View*, the largest smoky quartz crystal found in North America now belongs to the Pikes Peak Historical Society. This amazing specimen has been on loan to the historical society museum from Lake George club member Rich Fetterd. The crystal will now be on permanent display in the society's museum in Florissant. This was made possible by a generous donation from the Cripple Creek & Victor Mining Co.



File Photo, Lake George Gem and Mineral Club

Jane Mannon, community affairs manager at the mine noted that "this was a unique opportunity to keep the crystal in the area where it was found and it was a unique donation for us."

The crystal was found in the Holy Moses Pocket of Fretterd's Godsend Claim in Teller County. It is 4-foot, 3-inches long and weighs 439 pounds.

The museum is open 10 a.m. to 4 p.m. Mondays, and Wednesdays through Saturdays in summer and 10 a.m. to 4 p.m. Mondays, Thursdays, Fridays and Saturdays in winter. Admission is free.

For more information about the museum and the historical society, call 719-748-3562 or visit the Museum's Web site at [www.pikespeakmuseum.org](http://www.pikespeakmuseum.org).

### FUN QUOTES:

"I have a Bachelor of Science degree in geology from the City College of New York, and my great contribution to the field of geology is that I never entered it upon graduation."

- Colin Powell

"We live in a society exquisitely dependent on science and technology, in which hardly anyone knows anything about science and technology."

- Carl Sagan

"With their four-dimensional minds, and in their interdisciplinary ultraverbal way, geologists can wiggle out of almost anything."

- John McPhee

# PRESERVATION - WHAT'S UP?

## News from the FMCC Preservation Committee

FMCC sponsored a program on "Alternatives to Mine Closures" at the Denver Show. We had scheduled three panelists including Virgil Lueth of the Geology Museum at New Mexico Tech, Bruce Stover of the Colorado Inactive Mine Reclamation Program, and [Chris Stone](#), representing the Hidee Mine, a tourist mine near Central City that is still a gold producer. Dr. Lueth was unable to participate, but Bruce and Chris carried the day. The program was well attended and well received.

The estate of local collector Dick Holmes has contributed a large number of specimens to FMCC for dispersal. The Committee will evaluate these materials in the near future, and report its recommendations to the FMCC Board and membership.

Richard Parsons, Chairman

## A GOOD READ

***Granites Pegmatites: The State of the Art – International Symposium. 06th – 12th May 2007, Porto, Portugal.***

Pegmatite Genesis: Recent Advances and Areas for Future Research

**SKIP SIMMONS**

Department of Earth and Environmental Sciences  
University of New Orleans, LA 70148, USA

### ABSTRACT

*London's constitutional zone refining model of pegmatite evolution which involves disequilibrium crystallization from an undercooled, flux-bearing granitic melt is an important advance. The melt is not necessarily flux rich and the presence of an aqueous vapor phase is not required. Modelled cooling rates of rare element pegmatites are radically more rapid than previously believed. Advances by Petr !ern" in pegmatite classification and the fractionation trends of Nb, Ta and other HFSE and K, Rb, Cs, Li, Ga and Tl are widely used. Regional zoning, anatexis and chemical quenching are areas for future pegmatite research.*

*Review; Those members interested in the wheres and hows of the emplacement of pegmatite bodies and their minerals would do well to keep up with the on going research involving pegmatite formation and nomenclature. Mr Simmons gives a good report on the Pegmatite symposium of May last year (2007). The fourth pegmatite symposium will be held in Recife, Brazil, August 30–September 6, 2009, it will be interesting to hear what new ideas and concepts will be introduced to the field of pegmatology. Michael Wise of the Smithsonian will have a pegmatite field class here in Colorado the summer of 2009.*

# Review of The 41st Annual Denver Gem and Mineral Show September 12 - 14, 2008 "Minerals of Colorado"

The show theme of "Colorado Minerals" brought out some really great examples of what our state has to offer. From the show cases in the main room to the available specimens for purchase, the variety and quality of Colorado's minerals were on display for all to see.

On a personal note, I was involved in a show case of Mount Antero Minerals. At the Tucson show last February the idea was planted for some of the more serious field collectors to display some rarely seen specimens. The case would have to be limited to the more recent and active diggers. A decision was made to limit it to those collectors who have worked hard and long not only on their claims but also on the access road up the mountain. It was dubbed early on as the Antero Chain Gang, Six miners were eventually chosen and asked if they would bring their best three to five specimens they had collected off the mountain to the show case on the day of set up. These people knew of one another but some had never met. The day of set up arrived and we had only heard back that each person would try his best to get the specimens to the case. As time ticked down we were unsure if enough specimens would show to fill the six foot case. I was asked to bring all the specimens I could just in case we had some no shows. At the last minute the case was put together with some old risers wrapped hastily with new material. The diggers all showed up with some of the finest material off the mountain as crystals, unusual minerals, loose cut and mounted gemstones. I feel the case was a great success and we should see some future cases where some of our more serious local rock hounds will show what latest and greatest finds are currently being discovered.



The Mount Antero Show Case



The local miners who put together the Antero case. Tim Hilquist, John Melby, Tom Miller, Bill Hutchinson, Jeff Self and Bill Chirnsite.

A very informative talk was given by Mark Jacobson Saturday evening at the silent auction about collecting on Mount Antero which was centered around the people involved with the mountain. Mark was to leave the next Monday to move to China. We appreciate his effort to give such a wonderful program.

The show had a feel of great success.

### **Denver Gem & Mineral Show 2008 – Winners in the Special Competitions**

**Richard M. Pearl Trophy:** Richard Tripp (Pyrite, Spain)

**Best of Species Trophy:**

**Thumbnail** – Bill Chirnsite (Bertrandite, Mt. Antero)

**Miniature** – Bill Chirnsite (Phenakite, Mt. Antero)

**Cabinet** – Larry Havens (Barite, Muddy Creek, Rio Grande County)

**Oversize Cabinet** – Bill Chirnsite (Fluorite, Mt. White)

**Field Collected** – Bill Chirnsite (Phenakite, Mt. Antero)

**Lapidary/Jewelry** – Keith Sheel (Amazonite cab, mounted)

**Best Fossil:** Christopher Hayward (Fossilized Wood)

**Prospector's Trophy:** John Melby (Aquamarine, Chaffee County)

**C. E. "Shorty" Withers Trophy:** David L. Roter, "Colorado Rhodochrosite"

**Winners of Competitive Exhibits:**

**Best Museum Trophy:** Denver Museum of Nature & Science

**Individual Competitive Case Trophy:**

**Miniature Minerals** – Larry Havens  
**Single Species** – Lou Conti (Fluorite)  
**Open, Special Classification** – Dale Gann (Agate nodules, Wolf Creek Pass)  
**Faceted, Natural gemstones** – Keith Sheel  
**One Species, One country** – Barbara Sky (Barite, United States)  
**Thumbnail Minerals** – Ben Speed  
**Thumbnail Pseudomorphs** – Ben Speed  
**Single Specie, Cabinet size** – Les Presmyk (Sphalerite)  
**Club Prospector Trophy:** North Jeffco Gem & Mineral Club

## Denver Show Themes

Gentlemen,

It's time again to propose suggestions for themes for the Denver Gem and Mineral Show. Traditionally, we choose themes for several years in advance so planning for seminars (for example) can be anticipated. This coming year the show theme is "Fossils - Windows to the Past." We have no themes selected or approved for subsequent years.

Here are a list of previous show themes dating back a number of years, as well as a list of proposed themes that was generated the last time we recommended a slate of themes.

I would appreciate your input to this selection process. Please add themes to the list and choose, say 5, from the list that you think would be the best, viable choices.

This is an input stage so I will get back to you with a new list suggestions and choices that I receive from all of you.

With thanks and appreciation,  
Larry Havens

### Show Themes Reflected in Show Posters 1987 – 2009

2009 – Fossils – “Windows to the Past”	1996 – Topaz (Tarryalls)
2008 – Minerals of Colorado	1995 – Manganoan Calcite (Camp Bird)
2007 - Leadville Mining District	1994 – Pyrite (Mahala X, Leadville)
2006 – Minerals of South America	1993 – Beryl (Mt. Antero aquamarine)
2005 – Quartz and Cryptocrystalline Quartz	1992 – Silver (Commodore X, Creede), (silver anniversary of the show)
2004 – Zeolites and Friends	1991 – Colorado Quartz
2003 – Gilman Mining District	1990 – Rhodochrosite (Sweet Home X)
2002 – Colorado Gemstones	1989 – Barite (Otero Co.)
2001 – Minerals of the Pikes Peak Batholith	1988 – Amazonite/Albite (Lake George)
2000 – Minerals of the San Juan Mountains	1987 – Fluorite/Rhodochrosite (American Tunnel, Silverton)
1999 – Sphalerite	
1998 – Colorado Fossils	
1997 – Colorado Gold	

The following list is a compilation of a few lists that were looked at 2-3 years ago. They are just some of the many possibilities we have to choose from for 2010, 2011 and beyond. 2009 is to be a fossil with the exact theme to be decided yet.

## Potential Show Themes

1. Crystal Twins
2. Pseudomorphs
3. Galena
4. Diamonds
5. Garnets
6. Tourmaline
7. Creede Mining District
8. Revisit a Previous Theme
9. Copper Minerals
10. Minerals of the Southwest
11. Minerals of the Rio Grande Rift
12. Minerals of Chaffee County
13. Douglas Co.
14. El Paso Co.
15. Fremont Co.
16. Jefferson Co.
17. Lake Co.
18. Mineral Co.
19. Park Co.
20. Colorado "Type" Minerals (added by Bob L.)
21. Colorado Rare-Earth Minerals
22. Minerals of Canada
23. Minerals of Alaska
24. Minerals of Africa
25. Minerals of Europe
26. Spinel Group of Minerals (added by editor)

I (the editor) would like to suggest we look at the Spinel Group of minerals. Colorado has some exceptional Magnetite and Gahnite. Eckel lists twelve counties that have spinel minerals outside of magnetite.

## Friends of Mineralogy, Colorado Chapter Publications available for sale, 2008

Photography of Mineralogical, Paleontological, and Archaeological Specimens (1989) A Symposium on the Equipment and Techniques for Professionals and Amateurs, 74 p. + 18 p. of reprinted articles by Jeff Scovil from Rocks & Minerals Magazine\$ 2.00

Antero Aquamarines, by Mark Jacobson (1993) \$ 15.00  
L.R. Ream Publishing, softcover, 126 p. + 8 color plates

Minerals of Colorado (1997) \$140.00\*  
Fulcrum Press, 665 p. plus 40 plates with 118 color and 27 b&w photos

Pegmatite Symposium Abstracts (1999) \$ 10.00\*\*  
The Eugene E. Foord Memorial Symposium on NYF-type Pegmatites, 73 p., as published in Canadian Mineralogist, vol. 37, part 3, June 1999, pp. 791-863.

Pegmatite Symposium Field Trip Guidebook (1999) \$ 10.00\*  
Field guide to NYF-type [Nb-Y-F] Pegmatites of the Pikes Peak Batholith; field trips to the Lake George and South Platte pegmatite districts; 36 p.

Symposium on Gemstone Deposits of the Rocky Mountain Region, Program and Abstracts (2002) Program & abstracts of an FMCC symposium; \$ 15.00  
79 pages including 3 pages plus cover in color



Symposium on Agate and Cryptocrystalline Quartz (2005)                      \$ 20.00\*  
From an FMCC symposium; 144 pages including 3 pages plus cover in color; reprinted in 2006

\* limited number of copies left in stock; orders will be filled as long as copies are available.  
\*\* the limited number of copies remaining have a slightly irregular binding—an extra set of punched holes on the outer margin of half the pages.

Make checks payable to Friends of Mineralogy, Colorado Chapter  
Postage and sales tax will be paid by FMCC. To order, write to Friends of Mineralogy, Colorado Chapter, P.O. Box 5276, Golden CO, 80401-5276; or contact Jim Hurlbut, Treasurer, 303-758-0283, [jfhu@vanion.com](mailto:jfhu@vanion.com), or Pete Modreski, 303-202-4766, [pmodreski@usgs.gov](mailto:pmodreski@usgs.gov)

**LITTLETON GEM & MINERAL CLUB SILENT AUCTION**  
**Saturday, November 15, 2008**  
**11:30 a.m. to 5:00 p.m.**  
**Columbine Hills Church**  
**Littleton, CO 80123**

<b>When:</b>	11:30 a.m.	Sellers' Setup
	12:00 noon	Silent Auction begins
	12:30 noon	Business Meeting & Verbal Auction
	1:15 p.m.	Silent Auction resumes
	2:30 p.m.	Start closing tables
	4:00 p.m.	Start checkout
	5:00 p.m.	Checkout completed

**Where:**        **Columbine Hills Church**  
9700 Old Coal Mine Avenue  
Littleton, CO 80123

**What to Bring:**

**Items to Sell:** Minerals, gems, jewelry, fossils, books, equipment and anything else related to our hobby. Non-members are requested to limit items to 12 because of space limitations. LGMC gets 20% of the selling price.

**Sunshine/Flower Fund Table:** We ask each member to donate an item to this table, with 100% of the proceeds used for the club's Sunshine activities, including cards and memorial trees. There are special **pink bid slips** for this table.

**Children's Table:** This table is reserved for children's purchases only (ages 12 and under). Bidding is by ten-cent increments. Please donate a few items to begin or add to a Pebble Pup's collection. This is 100% donation. Please use **blue bid slips**, available at the auction.

**Refreshments:** Appetizers, desserts, and snacks in the finger food category are provided. Thanks go to all contributing members for providing this superb refreshment table.

## **What to Do:**

**Bid Slips:** A seller fills out a **LGMC bid slip** for each item. Bidding slips can be obtained from the club website (<http://us.geocities.com/LittletonGMC/>), and will also be available at the auction. The bid slip should include the name of the item, the locality (if pertinent), and any other relevant information, a minimum bid (if desired), and **MUST** include the seller's number (or the club will not know whom to reimburse for the sale).

**How to Pay:** Payment must be made by check or cash. **NO CREDIT CARDS OR POST-DATED CHECK.**

**Seller and Bidder Numbers:** Buyer and seller numbers can be obtained at the auction, or beforehand by calling Ruth Zartman (303-973-0405). She will need your address, phone number, and club affiliation.

## **Meeting Dates for 2008**

The remaining dates for our 2008 meeting will be November 13.

Membership in FMCC and National FM is still only \$13 in 2008. Payment by check can be sent to the address on page 1 or given to our Treasurer or any Board member.

## **Newsletter**

Your newsletter editor encourages all FMCC members to send your email address so that you will receive the newsletter electronically. The email version of the newsletter is in color; the paper version will have none. Please send your email address to Editor Bill Hutchinson at [wmhutchi5@msn.com](mailto:wmhutchi5@msn.com). Also if you only want a paper newsletter but are presently receiving an email newsletter, let your editor know also.

## **Coming Events;**

**Nov. 7 "Rock Out for the Ridge"**, fund-raiser evening for Dinosaur Ridge, Morrison; see [www.dinoridge.org](http://www.dinoridge.org)

**Nov. 12, USGS Colloquium**, lecture, public welcome; **The Iron Hill (Powderhorn) carbonatite complex, Gunnison County, Colorado-A potential source of several uncommon mineral resources**, by Bradley S. Van Gosen; 10:00 a.m., Foord Room, Building 20, Denver Federal Center.

**Nov. 13**, Friends of Mineralogy, Colorado Chapter, bimonthly meeting, program, **The Cripple Creek Mining District**, by Dr. Bob Carnein; 7:30 p.m., V.I.P. Room at Denver Museum of Nature and Science; all visitors welcome.

**Nov. 13**, at the DMNS, IMAX Theater, 7:30 p.m., **An Evening with Richard Louv**, author of *Last Child in the Woods* and co-founder, *Children & Nature Network*. I don't have any further

information about this presentation at this time; check with the museum as the time approaches; [www.dmns.org](http://www.dmns.org)

**Nov. 14, Free GPS, Map, & Compass Class** at USGS, Lakewood; reservations, 303-202-4689 or [gpsworkshops@usgs.gov](mailto:gpsworkshops@usgs.gov)

**Nov. 14, Rush and Bust! Aspen's Silver Mining Legacy**, by Dr. Malcolm Rohrbough; 7:00 p.m., Heritage Lecture Series at the Western Museum of Mining & Industry, Colorado Springs; no charge, RSVP by Nov. 7 to 719-488-0880 or [info@wmmi.org](mailto:info@wmmi.org)

**Nov. 20-21 Colorado Science [Teachers] Conference for Professional Development**, Denver.

**Nov. 21-23 Mineral, Fossil, Gem & Jewelry Show**, Jefferson County Fairgrounds, Golden.

**Dec. 12-14 Flatirons Mineral Show**, Boulder County Fairgrounds, Hover Rd. & Nelson Rd. in Longmont, CO

**ONGOING, Sep. 26 - Jan. 4 DINOSAURS, Ancient Fossils-New Discoveries** at Denver Museum of Nature and Science.

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