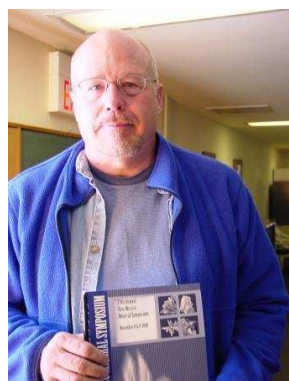


The Lake George Gem and Mineral Club -

**Club Newsletter,
February, 2009**



**Meeting Time 10:00 AM, February 14
at Lake George Community Center. Happy Valentine's Day!**



The Amazing Story of Guffey, Colorado

Geologist **Steven Wade Veatch** will present "**The Amazing Story of Guffey**" at a regular meeting of the Lake George Gem and Mineral Club on February 14. Guests are welcome at this very interesting meeting. There will be a short business meeting followed by the presentation.

Steve is president of the *Friends of the Florissant Fossil Beds* and a volunteer there. He and several other members of the **Lake George Gem & Mineral Club** and two Guffey residents did research for nearly a year for this project. They will share their photos and interesting discoveries. Examples of some of the minerals from the area will be on hand. This presentation has also been given at the *2008 Denver Gem & Mineral Show*, the annual *New Mexico Mineral Symposium*, and the *Colorado Springs Mineralogical Society*.

If you would like to hear about volcanoes, mining history, meteorites, blue agates, soda springs, and the archeology of the area, join us at 10 AM Saturday February 14 at the Lake George Community Center, just east of Lake George on US Hwy 24.

For further information, contact John Rakowski at (719) 748-3861.

Notes from the President:

We expect to have greater than normal attendance at the February meeting due to the publicity for the presentation of the Guffey Study Group. This will be an excellent presentation and a good introduction to the LGGMC for many members of the various communities attending. We'll have a Silent Auction including pieces generously donated by Rich Fretterd and other members. There are some really nice pieces from Rich, so bring some cash and be ready to spend!

We'll get a status report from the Project Study Group covering *The Mines & Minerals of Victor Colorado*. Please contact **Dan Alfrey** or **Steve Veatch** if you're interested in participating.

I will present some "housekeeping changes" to the By-Laws, including a change from June 30 to August 30 for half-price dues and also including email notice as one of the methods of notifying members of meeting cancellations due to weather. The changes will be presented at the February meeting and must be voted on during the March meeting.

Lake George Gem and Mineral Club

February, 2009

Dan Alfrey will introduce several ideas for future changes, such as adding a Club Historian, including more youth oriented programs, and possibly acquiring some Club mining claims (see Club News, below). The ideas will be presented with minimal discussion and will be studied more before the March meeting, where we can discuss them in more detail. If you want to be included in the discussion of these possible changes, contact Dan at the February meeting.

Dan Alfrey has continued to add to our Website (www.LGGMclub.org) and has been tweaking the details of that site, so be sure to visit it and recommend it to your friends. It's a website that the Club Members can be very proud of. ---**John Rakowski**, President

Reminder: It's wintertime, and in the event of adverse weather or dangerous road conditions, we will cancel the meeting. Watch for email notice of cancellation or call one of the Officers.

Silent Auction: Bring specimens, books, etc. that you can spare to help the Club's treasury!

Coming Events

- Monthly meeting, Rocky Mountain MicroMineral Society**, 2-4PM at Colorado School of Mines Museum Conference Room (contact Richard.parsons@worldnet.att.net for info) ... **February 8**
- "Chronicles of the Craggs"** by Jack Reed; Lookout Mountain Nature Center (for info or registration, call 720-497-7600) ... **February 8**
- "200 Years of Darwin" Conference: "Are we still evolving?"**, Metropolitan State College of Denver; free admission (for more info, e-mail gaither@mscd.edu) ... **February 12-13**
- Tucson Gem & Mineral Show**, Tucson Convention Center, 260 S. Church St. This year's theme is "Mineral Oddities. (\$9.00 admission) ... **February 12-15**
- "Fossil Forest of Lakewood"**, by Beth Simmons, Denver Gem & Mineral Guild monthly meeting, 7:30PM, Berthoud Hall, 1516 Illinois St., Golden. ... **February 13**
- Arizona Mineral & Fossil Show**, various venues, Tucson (free admission). (Go to www.mzexpo.com or xsupport@xpopress.com for more info.) ... **January 31-February 14**
- Columbine Gem & Mineral Society**, monthly meeting, 6:30PM, Mt. Shavano Manor, 525 W. 16th (at J St.), Salida. Visitors welcome. ... **February 14**
- Homesteaders, Fossils, and Scientists, a Tribute to Charlotte Hill on Her 160th Birthday**, Florissant Library Reception Hall, various speakers, reception, etc. Doors open at 11AM, and seating is limited, so come early! (Contact Steve Veatch for more info.) ... **February 15**
- Annual CSM Library Book Sale and Silent Auction**, 9-4; Arthur Lakes Library Conference Room, CSM, Golden (call 303-273-3540 for more info.) ... **February 16-20**
- Why are there so many "pretty" copper minerals?** by Bob Carnein, Colo. Springs Mineralogical Soc. Monthly meeting, 7:30PM, Colo. Springs Senior Center, 1514 N. Hancock Ave. Visitors welcome. .. **February 19**
- Gold Exhibit Opening Reception**, Western Museum of Mining and Industry, Colorado Springs, call 719-488-0880 for information and reservations. .. **February 26**
- Denver Gem & Mineral Guild**, Jewelry, Gem, and Mineral Show, Jefferson County Fairgrounds, 15200 W. 6th Ave., Golden (Go to DGMG website for more info.) .. **February 27-March 1**
- International Gem & Jewelry Show**, Denver Merchandise Mart, 451 E. 58th Ave., Fri. 12-6; Sat. 10-6; Sun. 11-5; \$7.00 admission. .. **March 6-8**

- “Paleoclimates: Exploring Past Environments”**, Western Interior Paleontological Society Founder’s Symposium; Sat. 8-5, American Mountaineering Center, Golden; Sun. 8:30-4, National Center for Atmospheric Research, Boulder. For info and registration, go to wipsppc.com or e-mail symposium@wipsppc.com ... **March 14-15**
- Albuquerque Gem & Mineral Show** “Treasures of the Earth”, School Arts/Flower Bldg., NM State Fairgrounds, San Pedro entrance. ... **March 20-22**
- Nature- and Science-Writing Workshop**, by Steve Veatch, Florissant Fossil Beds National Monument, 9AM-1PM. Cost is \$3 admission to the park. Call 719-748-3253 to register. ... **March 21**
- 48th Annual “Nature’s Treasures Gem & Mineral Show**, Fort Collins Rockhounds, Lincoln Center, 419 W. Magnolia St., Ft. Collins; Fri. 4-8, Sat. 9-6, Sun. 10-5. (Go to fortcollinsrockhounds.org or call 970-493-6168 for more info.) ... **March 27-29**
- North Jeffco Gem & Mineral Club Silent Auction**, 7-10PM, Arvada Senior Center, 6842 Wadsworth Blvd., Arvada. Call 303-423-2923 or contact jrknohaug@comcast.net for more info. ... **April 10**
- Colorado Mineral & Fossil Show (Spring)**, Holiday Inn, 4849Bannock St., Denver (free admission). ... **April 24-26**
- Contin-Tail Rock and Gem Show**, Buena Vista Rodeo Grounds (free admission) ... **August 6-9**
- Lake George Gem & Mineral Club Annual Show**, Lake George (free admission) ... **August 14-16**
- 42nd Annual Denver Gem & Mineral Show: “Fossils—Windows to the Past”** ... **September 18-20**

Club News

At the January meeting, new member **Mike Nelson** talked about Lake Bonneville, Utah and the Ice-Age animals that lived in that area (one of whom is shown below left; below right is our January speaker; photos by Dan Alfrey).



(a fuzzy nickel is shown for scale)



The Annual Mineral Show was announced for August 14-16 (see above), with a Jump Start scheduled for Tues. Aug. 11. The show set-up will be on the previous Saturday (Aug. 8). The Club buys pizza afterwards for helpers. Talk to Show Chairman John Rakowski about helping with this important Club event.

The March 14 meeting is the deadline for receipt of applications from high-school seniors for our annual scholarship. See the website for details.

Club member **Steve Veatch** announced the **2nd Annual Club Project for Presentation**. The topic is **The Mines and Minerals of Victor, Colorado**. The project will include scanning historical photos at the Victor Museum and field trips coordinated with CC&V Gold Mining Co. A meeting was held at the Woodland Park Library on January 29th to begin planning for the study.

Dan Alfrey recently initiated a lively electronic discussion about future items that the Club might want to pursue. These include

1. new activities to involve and educate youth
2. new activities focusing on how the Club might provide more community service
3. possible interest in staking mining claim(s) for the Club
4. historical documentation of the Club's past (other than minutes and the newsletter)

If you have ideas or input, Dan would be glad to hear from you at fieldtrips@LGGMclub.org For those of you who don't know him, Dan is our field-trip coordinator. He has recently circulated a tantalizing item about a planned dealer-only field trip associated with this year's mineral show, and a possible public field trip in the Lake George vicinity. More information to follow!

Richard Parsons notes that S.22 has passed the Senate. It is a bill that includes provisions that would have a big negative impact on fossil collecting on Federal land and would allow approved professional paleontologists to remove fossils on private land. Apparently, the fossil provision is hidden in a popular bill that may soon be considered by the House of Representatives. Contact Richard at Richard.parsons@worldnet.att.net for more information on this bill.

NOTES FROM THE EDITOR

Bob Carnein, Editor

ccarnein@lhup.edu

719-687-2739



If you like the pictures below, they go with an article that is now posted on the LGGMC website, thanks to author Mike Nelson. You'll find the whole article (which is a bit too long for the Newsletter) by going to <http://www.lggmclub.org/Articles.htm> Enjoy!

**HUNTING THE BLUES: AQUAMARINES ON MT. ANTERO;
WITH A COMMENTARY BY ZEBULON M. PIKE
Mike Nelson, LGGMC
csrockguy@yahoo.com**



Fig. 1. Mt. Antero, 14269', as viewed from "North Carbonate" Peak. Major collecting area is on lower peak in the middle.



Fig. 2. Phenakites and aquamarines collected on Mt. Antero (photo courtesy of Amanda Adkins).

THE COLOR PURPLE
From Popular Mineralogy #8
©Dr. Andrew A. Sicree
(Used by permission)

Fluorite occurs in a rainbow of colors, but purple is, perhaps, its most characteristic color. We've all seen beautiful, deep-purple fluorite cubes from the Cave-In-Rock District, in Hardin County, Illinois. What causes this color?

Analyses of natural purple fluorites have shown no consistently present trace element impurities that can explain the purple color. In fact, if you take a clear, colorless lab-grown fluorite crystal of the highest purity and irradiate it (i.e., bombard it with atomic radiation), you can induce the same purple coloration.

Purple coloration in fluorite is often attributed to "F centers" and indeed this is correct. But in the term "F center" the "F" simply stands for *Farbe*, the German word for color. Saying that the color is due to a color center provides only very limited information.

The fluorite crystal is a regular cubic lattice of positive calcium cations (Ca^{+2}), and negative fluoride anions (F^-). However, in even the most perfect crystal, there are defects, typically at the 0.01% level. Some of these defects occur when a fluoride anion is displaced; instead of being in its proper position, the ion is caught in an interstitial site. This leaves an empty site where the fluoride anion should have been. If an electron becomes trapped in this vacant site, it creates what is called an *electron color center*. This gives the otherwise colorless fluorite the ability to absorb light in the green-red portion of the spectrum and the crystal appears purple.

Energetic radiation (such as from a nuclear reactor or from the decay of uranium or potassium-40 in nature) bumps electrons into the fluorite crystal's vacancies and thus turns a colorless crystal purple. It only takes about a hundred F centers for every million fluoride ions to create a deep purple fluorite specimen. No trace impurities are needed. One should also note that it is possible to reverse this process. If you heat a purple fluorite sufficiently, you can change it back to its colorless state.

Ref.: Nassau, Kurt, *The Physics and Chemistry of Color*, (Wiley, New York, 1983) pp. 184-190

Popular Mineralogy is published periodically by Dr. Andrew Sicree,
PO Box 10664, State College, PA 16805.



Lake George Gem and Mineral Club
Box 171
Lake George, Colorado 80827

2009 MEMBERSHIP APPLICATION

Name(s) _____

Address _____ City _____ State ____ Zip _____

Telephone () _____ - _____ E-mail _____

Names and ages of dependent members: _____

Annual membership - dues Jan. 1 through Dec. 31 are as follows:

- Individual (18 and over) \$15.00
- Family (Parents plus dependents under age 18) \$25.00

Annual dues are due on or before March 31. Members with unpaid dues will be dropped from the roster after this date. **Anyone joining after August 15 shall pay one half the annual dues.**

I hereby agree to abide by the constitution and by-laws of this club.

Signed _____ Date: ____/____/____

I have previously been a member of Lake George Gem & Mineral Club. Yes ___ No ___

My interest areas include:

Minerals ___ Fossils___ Lapidary ___ Micromounts ___
Other _____

I would be willing to demonstrate any of the above for a club program or educational activity? If yes, which: _____

Please indicate which of the following activities you might be willing to help with:

Writing _____ Editor _____ Mailing _____ Local shows _____

Club Officer _____ Programs _____ Field trips _____ Refreshments _____

Questions about the club or club activities? **Contact John Rakowski (719) 748-3861**

www.LGGMclub.org

Lake George Gem and Mineral Club

February, 2009

**Lake George Gem and Mineral Club
P.O. Box 171
Lake George, CO 80827**

The Lake George Gem and Mineral Club is a group of people interested in rocks and minerals, fossils, geography and history of the Pikes Peak/South Park area, Indian artifacts and the great outdoors. The club's informational programs and field trips provide an opportunity to learn about earth sciences, rocks and minerals, lapidary work and jewelry making, and to share information and experiences with other members. Guests are welcome to attend, to see what we are about!

The club is geared primarily to amateur collectors and artisans, with programs of interest both to beginners and serious amateurs. The club meets the second Saturday of each month at the Lake George Community Center, located on the north side of US Highway 24 on the east edge of town, sharing a building with the county highway shops. **In the winter we meet at 10:00 AM. From April through September, we meet at 9:00 AM, to allow more time for our field trips.**

Our organization is incorporated under Colorado law as a nonprofit educational organization, and is a member of the Colorado, Rocky Mountain and American Federations of Mineralogical Societies. We also sponsor an annual Gem and Mineral show at Lake George, where collectors and others may purchase or sell rocks, minerals, fossils, gems or jewelry. Annual membership dues (Jan. 1 through Dec. 31) are \$15.00 for an individual (18 and over), and \$25.00 for a family (Parents plus dependents under age 18).

Our Officers for 2009 are:

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