

The Lake George Gem and Mineral Club -

Club News,

June 14, 2008



Meeting Time 9:00 AM

Meeting Place: Cheesman Trailhead

Meeting and Field Trip June 14:

As an alternative to having members drive to Lake George for the meeting at 9am, then drive to field trip site we will meet at the USFS Trailhead, formerly the Wigwam Picnic Site, now Cheesman Trailhead on Jefferson County 126, just north of Deckers. From Woodland Park go north on CO 67 and at Deckers bear left center across bridge on Jeffco 126. From Pine Junction go south on Jeffco 126. Meet at Cheesman Trailhead at or before 9am and John Rakowski will lead convoy leaving at 9:05 am SHARP to the field trip site. Get there early at the Cheesman Trailhead as John will have examples of the material to be found on this trip. When we get to field trip site we'll have a SHORT business meeting. If anybody has an item they want covered at the business meeting, please give John an alert by email ahead of time.

On this field trip you will likely find smoky or clear quartz crystals, clear, purple or green fluorite and pink feldspar. You may also find amazonite or topaz. This will be a joint trip with the Denver Gem & Mineral Guild and the Littleton Club.

The field trip site has no water or facilities. Elevation is about 8500 feet and the terrain is relatively gentle ponderosa and fir forest with some steep rocky terrain. Some good digging is within 100 yards of vehicle parking sites. You can carefully drive a normal 2 wheel drive vehicle. It may be hot and dry, bring plenty of water. Nearest gas is where you came from, be sure you have a full tank when you leave home. Feeding small unsupervised kids and dogs to the bears and mountain lions is discouraged - you will need to leave them home or watch them carefully. Necessary tools: pick, shovel, brush, old screwdriver. Desirable tools: pry bar, small sledge and chisels, bamboo skewers, additional small picks, trowel. Bring egg cartons/newspaper/boxes etc to bring your specimens home. Call John Rakowski at 719-748-3861 if you have further questions.

Silent Auction – *None this month*

Club T-Shirts

Dee Loest tells us that Club members may now order Club T-shirts! The T-shirts are red with a white club logo and lettering on the back. The shirts are priced according to size, including 71/4% sales tax, embroidery of logo and shipping charges.

Adult sizes Small through XLG are \$11.80 each, and are as follows:

S - 34-36 M - 38-40 LG - 42-44 XLG - 46-48

Sizes XXL (50-52) and 3X (54-55) are \$13.87

Sizes 4X (57-58) and 5X (60-61) are \$14.60 each

Checks should be payable to: **LAKE GEORGE GEM & MINERAL CLUB**. Please enter the number of shirts and the size(s) desired on the memo portion of check or attach a note with this information. We would like to have a sizeable order by the end of June!

As our Treasurer will not be at the June meeting, out of town members may send their payment and order information to Lake George Gem and Mineral Club, **P.O. Box 171, Lake George, CO 80827**. It will take time to get the orders compiled and submitted to the manufacturer; they will then work them up as quickly as possible. Please let Dee know if any other info is needed (719-748-0399).

Coming Events

With the Club's field trip underway along with the numerous offerings of the Friends of the Florissant Fossil Beds, there is a great array of collecting and occupational activities available to Club members. In addition to collecting trips, the Club will be taking several trips to the Guffey area, in conjunction with the Club's project documenting the geology and history of the Guffey area.

The Friends of Florissant Fossil Beds, Inc. offers one- to three-day seminars in a variety of geology, biology, humanities, and paleontology courses. Courses related to the earth sciences and archaeology are listed below;. For information on the many other offerings, check for further info on the NPS website, listed below.

The regular fees for each seminar are \$50.00 per person for a one - day seminar, \$65.00 for a two- ay, and \$80.00 for a three day seminar. Reduced rates are available for members of the Friends of the Florissant Fossil Beds, Inc. Registration information will be available on the Monument's website t <http://www.nps.gov/flfo> and go to the link for Education Programs. If you join the Friends of the Florissant Fossil Beds, Inc. either as an individual or family, you will receive a \$10.00 discount on the seminar fee.

LGGM Club field trip to the Guffey area – The first official trip of the Guffey Project

... **June 8
(Sunday)**

10 am at Fire Station # 2 -- County Road 102.in Guffey. This will be a review of the mudflows, an obsidian site, a quarry site and the cold spring. We will explore these sites and take photos. The trip will last about 4-6 hours. There is *No limit on the number of people* to come on this trip. Participants will need to sign in with the Trip Leader before leaving the meeting place. Contact Dan Alfrey for details at AlfreyDan@aol.com

- Lake George Gem and Mineral Club - Meeting Time 9:00 at the Cheesman Trailhead, NW of Deckers.** The Denver Gem & Mineral Guild has invited the Lake George Club to join them on a field trip to their claim(s) in the Wigwam Creek area. Smoky quartz, microcline (both pink and the blue-green amazonite variety), fluorite, topaz, zinnwaldite and zircon have been found in this area. **See "Club News", above for details.** ... June 14
- Basic Map and Compass (Day 1); GPS and GIS (Day 2)** ... June 21 - 22
Geoff Irons (REI) and Nancy Shock (NPS) 9 – 5 at the Florissant Fossil Beds National Monument (Detailed Description below)
- 44th annual Gem, Mineral, Jewelry and Fossil Show** ... Jun 21-22, 2008
Colorado Springs Mineralogical Society, Colorado Springs, CO. Held at Phil Long Expo Center - 1515 Auto Mall Loop.
- Molly Kathleen Mine Tour** ... June 29
Meet at the mine at 2:00 PM. The mine is located right on Colo. Hwy 67 just north of Cripple Creek. There is a fee (\$15.00 Adult, \$10 age 3 - 12, under 3 free), with a 10% discount if we drum up 25 people. This will be a joint trip with the North Jeffco club. A detailed description of the tour is available at (<http://goldminetours.Com/Home.HTML>) We will descend 1000' underground in America's only vertical shaft gold mine tour. Experience life as it was for hard rock gold miners of Cripple Creek; and witness the evolution of underground mining methods from 1891 to the present.
- Petra Placer** July 12
Rich Fretterd has again invited the club to dig for topaz at his placer claim. Following a challenging climb, participants will dig and screen for topaz crystals in the loose dirt and rubble. Contact Dan Alfrey for details at AlfreyDan@aol.com
- Archaeology of South Park** ... July 19
Dr. Susan Bender; 9 – 5 at the Fossil Beds (Detailed Description below)
- Spruce Grove** ... July 19
Another topaz dig! The trip will begin at the Spruce Grove campground N. of Tarryall There a half mile hike up a steep trail to the beginning of the collecting area. Some crystals of topaz have been found loose, but most are found by digging for pockets in the pegmatite, which may also contain smoky quartz, microcline, and pseudomorphs of goethite after siderite. Contact Dan Alfrey for details at AlfreyDan@aol.com
- Treasures in the Basement: Pegmatite Minerals of the Pikes Peak Granite at Crystal Peak** ... July 20
Dr. Bud Wobus, 9 – 5 (Detailed Description below)
- Free USGS GPS, Map, and Compass Classes.** ... Now through November
June 13 and the second Friday of every month through November, Building 810, Federal Center, Lakewood; 9-11 a.m. Map & Compass, 12-4 p.m., GPS class. Call 303-202-4689 or email gpsworkshops@usgs.gov for reservations, or see www.cr.usgs.gov/gpsworkshops/index.html for more information.
- Lake George Gem and Mineral Show** ... August 15 – 17, 2004

For more information about prices, logistics, registration, or any other questions, about the programs offered through the Florissant Fossil Beds National Monument or should you wish to register by phone please call the Monument at (719) 748 – 3253 and ask for extension 109 and leave a message or fax at (719) 748-3164 or email at jeff_wolin@nps.gov or send a letter to PO Box 185, Florissant, CO 80816.

May 31, 2008, 9 – 5, Geology and Paleontology of the Florissant Valley, Dr. Herb Meyer (NPS)

This course investigates the geologic events that shaped the formation of the fossil- rich Florissant Formation. Basic concepts of geology relating to Florissant are discussed, including rock types, volcanoes, dating and stratigraphy. The geologic processes responsible for the formation of the fossil beds are examined in detail, including an overview of regional geologic history through the past 1.4 billion years, types of fossilization, the relation of the fossil beds to the Guffey volcanic center, and sedimentation patterns in the ancient lake. The paleontology of the fossil beds is discussed, including the types of plants and insects that were present, the use of fossils in reconstructing climate and elevation, and the preservation of fossils. A 2-hour field trip examines geologic features as a means for reinforcing these concepts. Handouts will be provided, and numerous slides will be shown. Both basic and advanced topics will be discussed, and it is recommended that students have a previous background in geology. The course is most suitable for science teachers or people with an interest in geology.

June 21 - 22, 2008 9 – 5, Basic Map and Compass and GPS and GIS, Geoff Irons (REI), Nancy Shock (NPS)

This is a two- day, outdoor course. Learn the basics of compass navigation, topographic maps, and how to use them together to safely travel in the outdoors. The next day will introduce GPS (Global Positioning Device) and GIS (Geographic Information Systems).

July 19, 2008, 9 – 5, Archaeology of South Park, Dr. Susan Bender

This class will focus on the basics of archaeology. For example, how an excavation is accomplished. This will cover techniques and theory. In the afternoon, there will be a field trip to South Park, near Wilkerson Pass to an archaeological site. Participants will have an opportunity to see a real excavation and meet with volunteers who are conducted the research. Participants must be able to hike up to 3 miles over varied terrain.

July 20, 2008, 9 – 5, Treasures in the Basement: Pegmatite Minerals, of the Pikes Peak Granite at Crystal Peak, Dr. Bud Wobus

The oldest ("basement") rocks of the Florissant area are granites of the Pike Peak intrusive event which occurred about a BILLION years ago. Associated with certain phases of this granite are pockets of coarse crystals (pegmatites) which have made the area around Crystal peak famous among mineral collectors. Amazonite (and other less colorful forms of feldspar), smoky quartz, micas, and a host of other minerals occur in these small bodies. The day will begin with a slide program at the Monument. Handouts for the field trip will be provided, and one relevant but optional publication is for sale at the Monument Visitors' Center. This seminar is suitable for anyone with an interest in geology and mineralogy. We will spend the afternoon searching the "dumps" of pegmatites on the Callender property at Crystal Peak, where we have been granted access. To put the mineralogy in perspective, the morning will be devoted to a field trip in the surrounding area to understand the regional geologic setting, which includes granites older than the Pikes Peak (which also contain pegmatites, but of a different kind) and the still- older metamorphic rocks they intruded. We will learn to distinguish the several generations of granite, only the youngest of which contains the famous pegmatites. You should be able to do some moderately strenuous hiking and should have sturdy footgear.

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 at 18033 Teller County Road 1 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 Fetterd's Godsend Claim in Teller County. It is 4-foot, 3-inches long and weighs 439 pounds. (see picture below).

For those new members of the Lake George Gem and Mineral Club who may not be familiar with the history of the mineral exhibits at the Museum, the exhibit began with specimens donated by Club members. The club has

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, Thurs\days, 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.

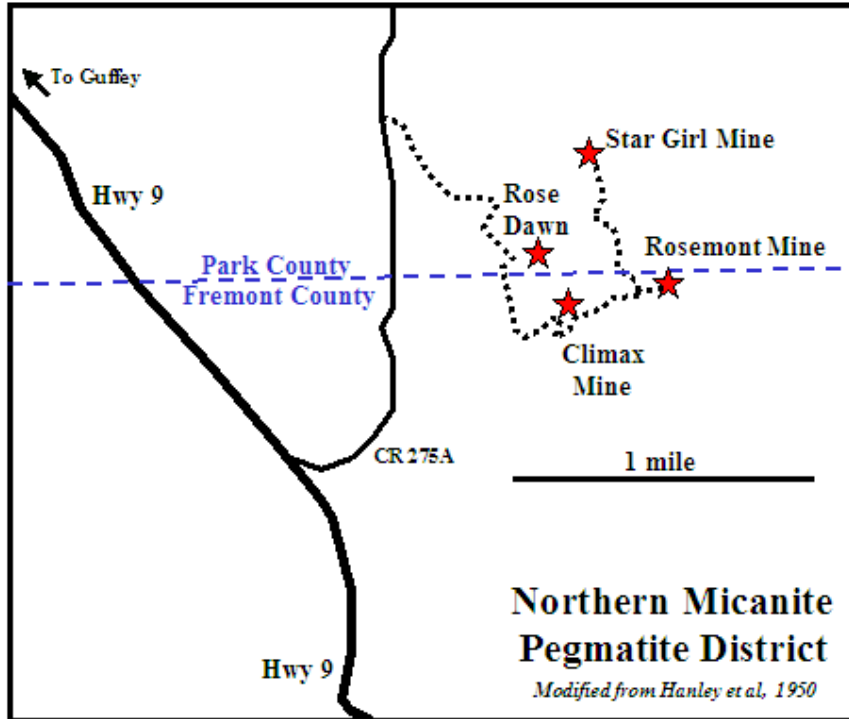
ZONED PEGMATITES OF THE MICANITE DISTRICT FREMONT AND PARK COUNTIES, COLORADO

By Andy Weinzapfel

INTRODUCTION

This article is based on library research and field work conducted during 2007.

The Micanite pegmatite district covers an area about 4 square miles, partially on BLM land, partially on private property. Focus of this article will be on the northern portion of the district having favorable access.

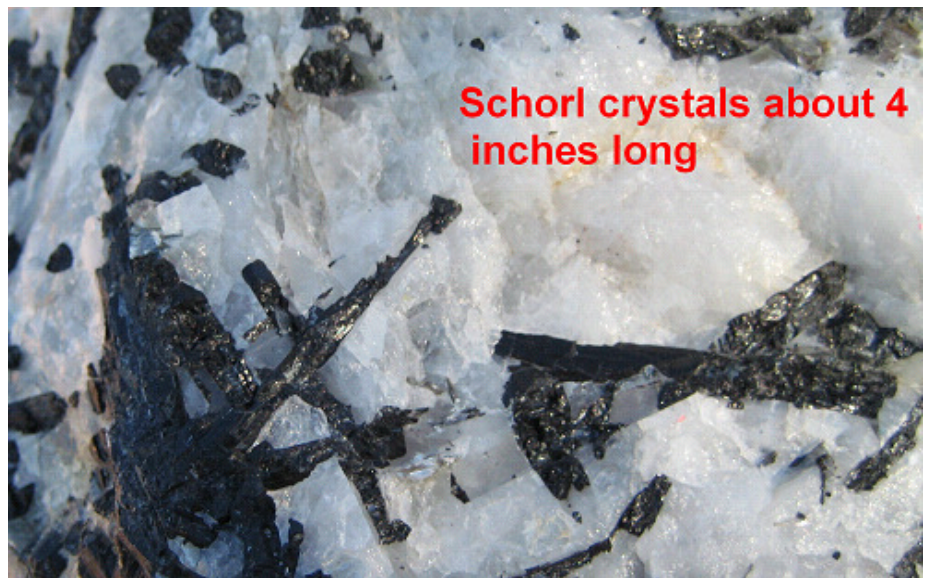


Based on mapping by Wobus et al (1979) the area is dominated by metamorphic rocks, mostly biotite-cordierite-sillimanite gneiss and schist. The district is characterized by steep topography, and is an erosional window through rather monotonous younger rocks associated mainly with the nearby Guffey volcanic center. Pegmatites intrude Precambrian metamorphic rocks. Minerals reported from the pegmatites include large “books” of muscovite mica, pink microcline masses as much as 10 feet across,

cordierite, white albite, biotite, apatite, schorl, garnet, beryl and rose quartz. Probably the most abundant attractive mineral remaining for the collector is schorl (black tourmaline):

MINING HISTORY

The mining history of the district is described by Hanley et al (1950). In 1902 and 1903, the United States Mica Company located and high-graded several pegmatites. Much development work was done during 1904-1907. The district remained inactive from 1907-1934, when the known major deposits were acquired by Colorado Feldspar Company of Canon City. From 1934-1942, the company produced about 2,000 tons of feldspar and 175 tons of scrap mica.





Ghosts above Climax Mine

PEGMATITE ZONATION

Several of the major pegmatites are zoned; that is, discrete areas can be mapped based on differing mineralogy or grain size. Worldwide, zoned pegmatites usually occur in clusters. From inward to outward, four zones are recognized (Hanley et al, 1950):

The **core zone** consists of white quartz with minor cream-colored microcline. This unit is highly resistant to erosion. Crystals of mottled flesh-pink and green apatite as much as 3 feet long and 1 foot wide have been reported from the west side of the Rose Dawn pegmatite. The apatite zone, several feet across, was recognized in the field, although no giant crystals were noted. This mineral fluoresces a dull yellow brown.



resistant quartz core outcropping within Rose Dawn mine dump

The **intermediate zone** consists primarily of quartz, albite, and muscovite. Cordierite crystals are reported to extend across the intermediate zone into the core. Masses of muscovite up to 4 feet in diameter have been described.

The **wall zone** consists of quartz, reddish microcline, white albite, muscovite, and biotite. Accessory light brown garnet crystals are present, as well as large muscovite books. Schorl was noted in the field in this zone at the east side of the Rose Dawn pegmatite.

The **border zone** is an extremely narrow zone at the edge of the metamorphic country rock. The same minerals as above are found, but are much finer grained.



INTRIGUING MYSTERY MINERAL

Bever, 1953, describes an occurrence 300 feet west of the Climax pegmatite of “glassy grey-violet cordierite as much as 3 millimeters in diameter”. While specimen size is small, the description is intriguing because it appears to be that of iolite, the gemstone variety of cordierite. Since cordierite is a hard mineral, 7 or more on the mohs scale, with minimal cleavage, iolite can become an attractive target. This “occurrence” was briefly field-checked but no iolite found. Abundant non-gemmy black cordierite is present in the area described. It is possible that further field investigation might find iolite also.

SAFETY AND COLLECTING TIPS

Several pegmatite mines in the district have narrow, exploratory tunnels. These should be avoided.

In my opinion, the best pegmatite for mineral collecting with relatively easy access is the Rose Dawn. Unfortunately, due to safety hazards described below, this mine is not recommended for any club field trip. The road below the mine dump has parking for only one vehicle, but one can also drive directly to the mine face. The mine dump contains significant schorl, minor beryl, apatite, rose quartz, and attractive small-scale radiating “feather muscovite”. However, the dump is rather steep and unstable. Large rocks can easily be dislodged and roll down the slope onto fellow collectors, or directly onto the main road below. Above the dump, at the nearly vertical mine face, there are many loose boulder-sized rocks high on the wall which can be dislodged by collecting activities, especially hammering. At the east side of the mine face, schorl is present but rocks above are very unstable. Near the west side, both apatite and small amounts of beryl can be found. The beryl is light green to cream colored.

The easiest place to collect large books of muscovite is at the Climax mine, where ample parking is available. Parking is no problem at the Star Girl mine also.

ACCESS/ PERMISSION

To the best of the author's knowledge, all BLM land in the northern part of the district was entirely open the summer of 2007. BLM Land and Mineral Use Records (<http://www.geocommunicator.gov/GeoComm/landmin/home/index.shtm>) did not list any active claims nor was any claim activity observed in the field. However, the collector should always make every effort to determine current land status prior to mineral collecting!

SELECTED REFERENCES

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Simandl, G., Marshall, D. and Laird, J., 1999, Gem-quality cordierite deposits, Slocan Valley, British Columbia: Geologic Fieldwork, paper 2000-1, p 349-358

Wobus, R.A., Epis, R.C., and Scott, G.R., 1979, Geologic map of the Cover Mountain quadrangle, Fremont, Park, and Teller Counties, Colorado: USGS Map I-1179

Lake George Gem and Mineral Club
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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).

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