

The Lake George Gem and Mineral Club -

**Club News,
June, 2009**



NO REGULAR CLUB MEETING IN JUNE!

Field-Trip Chair Dan Alfrey has made arrangements for members to tour the Alma Placer Gold Mine on **Saturday, June 13**. Participants will meet in Alma at 8:30AM. Bring hard hat (will be provided if you don't have one), and wear sturdy boots (steel-toed preferred). We will tour the mine and then have until noon to dig/pan/metal detect. **Club membership is REQUIRED**. Contact Dan at AlfreyDan@aol.com.

WigWam Claim Field Trip with the Denver Gem & Mineral Guild is June 6! Meet at Cheeseman Lake Hiking Trailhead at 8:30AM. Bring water, lunch, tools, etc. Contact Dan for info.

Coming Events

- Wigwam Claim Field Trip** with Denver Gem & Mineral Guild (contact Dan Alfrey, alfreydan@aol.com for details) ... June 6
- Triceratops Trail Day**, 10AM-2:30PM, Dinosaur Ridge Visitors' Center; free; contact tom_moklestad@dinoridge.org or 303-697-3466 x13 for information. ... June 6
- Free GPS, Map, and Compass Class**, USGS, Denver; call 303-202-4689 for reservations, or visit gpsworkshops@usgs.gov. ... June 12
- International Gem & Jewelry Show**, Denver Merchandise Mart, 451 E. 58th Ave., admission \$7.00; info at 301-294-1640. ... June 12-14
- Dinosaur Discovery Day: Geocache and Earthcache Day**, 10AM-2:30PM, Dinosaur Ridge Visitors' Center; free; contact tom_moklestad@dinoridge.org or 202-697-3466 x13 for information ... June 13
- Rocky Mountain Micromineral Association**, monthly meeting, Colorado School of Mines Mineral Museum, Golden, 2PM. (Contact Richard Parsons at Richard.parsons@worldnet.att.net for info) ... June 14
- Cave of the Winds GeoAdventure**, Pillar Institute of Lifelong Learning and Steve Veatch; cost TBD. Call 719-633-4991 to register. ... June 19
- "The Fossil Record: an Introduction to Paleontology"**, Cripple Creek Parks & Recreation, cost \$69; call 719-689-3514. Cost includes 2 field trips; can be used for 0.5 hr grad. credit at CSM (tuition extra). ... June 20
- Colorado Springs Mineralogical Society "Rock Fair"**, at Western Museum of Mining and Industry, contact Yam Yamiolkowski at 719-488-5526 or Ron.Yamiolkowski@aecom.com ... June 20

- Garden of the Gods and Red Rocks Open Space**, Friends of the Florissant Fossil Beds Summer Seminar Series, cost TBD. Call 719-748-1156 to register; can be used for 0.5 hrs. grad. Credit at Adams State College (tuition extra). ... **June 27**
- Annual Mineral & Fossil Sale at GEOdessey**, 15339 Ellsworth Dr., Golden; info at 303-279-5504. ... **June 27**
- “Cruisin the Fossil Freeway”** lecture by author Kirk Johnson and illustrator Ray Troll, Denver Botanic Gardens, Mitchell Hall, \$10 donation (see Denver Botanic Gardens website for details) ... **July 1**
- Lake George Gem & Mineral Club** field trip to Rich Fretterd’s Petra Placer ... **July 11**
- Dinosaur Ridge Class**, Steve Veatch and others, Cripple Creek Parks & Recreation, cost is \$33, including transportation. Call 719-689-3514 for information. ... **July 11**
- Contin-Tail Rock and Gem Show**, Buena Vista Rodeo Grounds (free admission) ... **Aug. 6-9**
- Fairplay Bead & Fiber Show**; Fairplay, CO; contact Pat Pocius at 719-836-2698. ... **Aug. 8-9**
- Lake George Gem & Mineral Club Annual Show**, U.S. Highway 24 (next to Post Office), Lake George (free admission) ... **Aug. 14-16**
- “The History of Scientific Discovery at Florissant Fossil Beds N.M.”** by Dr. Herb Meyer and Steve Veatch, Friends Summer Seminar Series; cost TBD. Call 719-748-1156 to register. Can be used for 0.5 hrs. grad. Credit at Adam State College (tuition extra). ... **Aug. 23**
- Colorado Mineral & Fossil Show (Fall)**, Holiday Inn, 4849 Bannock St., Denver (free admission); info at MartinZinnExpositions ... **Sept. 16-20**
- Denver Coliseum Mineral, Fossil, Gem, & Jewelry Show**, Denver Coliseum, 4600 Humboldt St.; \$3/\$2 admission; info from Lowell Carhart, 719-886-7046. ... **Sept. 16-20**
- Bead Renaissance Show**, Crown Plaza, 15,500 E. 40th Ave., Denver; call 575-894-1293 for info. ... **Sept. 17-20**
- 42nd Annual Denver Gem & Mineral Show: “Fossils—Windows to the Past”** Denver Merchandise Mart Expo Hall, 451 E. 58th Ave. (I-25 exit 215); \$6/\$4 admission. ... **Sept. 18-20**
- Colorado Fossil Expo**, Denver Merchandise Mart Plaza Annex, 451 E. 58th Ave.; \$6/\$4.50 admission; info at MartinZinnExpositions. ... **Sept. 18-20**
- Field Studies in Paleontology: Exploring the Shelf Road from Cripple Creek to Garden Park, Colorado**, Cripple Creek Parks & Recreation; cost is \$69. Call 719-689-3514 to register. Can be used for 0.5 hr. grad. Credit at CSM (tuition extra). ... **October 3**
- 46th Annual Pikes Peak Gem & Mineral Show**, Phil Long Expo Center, Colorado Springs, contact Rick Copeland, 719-332-7915 or rick@rockymountainwonders.com ... **Dec. 5-6**

Club News

About 30 members, including new member **Ken Beyler** of Seattle, attended the May 9 meeting for a choice of 2 field trips: one a guided tour of the Victor area by **Ed Hunter** and **Steve Veatch** (as a part of preparations for the Club’s Victor Study Project); and the second a collecting trip to the **CSMS private April Fools club claim** (managed by John and Laurie Casto) in the Crystal Creek mining district. A great time was had by all, but those on the Victor trip were disappointed to find that the “bear caves” have disappeared. We’re all thankful that Steve took pictures before they were obliterated.

Before leaving for the trips, President **John Rakowski** reported on preparations for the August show, noting that the cost of porta-potties and dumpsters has gone up a lot. **Dee Loest** reported that an order for 18 Club t-shirts is ready to go out. **Mary O'Donnell**, our Club historian, has submitted a draft history to John Rakowski.

Dan Alfrey reminded members that the Victor Study Project group will meet on June 9 and 23 and that we hope to present a report at Victor Gold Rush Days in mid to late July. Dan also noted that, besides the WigWam and Alma trips listed above, trips are planned to the PetraPlacer (**Rich Fretterd's** claim) in late July and to a **Joe Dorris** claim in the Crystal Creek district on July 26 (for **new members only**). Also scheduled are a Show set-up and pizza party on **August 8** and a Glen Cove inter-club field trip (with DGMG and CSMS) for smoky quartz and topaz on **August 29**. Besides everything else Dan is doing, he wants you to contact him if you have ideas for youth activities! Let's get more young people involved in mineral collecting.

Steve Veatch reminded members about the Summer Seminar Series, run by the Friends of the Florissant Fossil Beds; the 40th Anniversary Celebration at the Florissant Fossil Beds (**August 22-23**; contact Jeff Wolin at 719-748-3253 or go to the Fossil Beds website for information), and the **July 11** Dinosaur Ridge trip, sponsored by Cripple Creek Parks & Recreation.

Our condolences to **Margaret Breth**, whose mother recently passed away at age 94.

NOTES FROM THE EDITOR

Bob Carnein, Editor
ccarnein@lhup.edu
719-687-2739



I hope you all enjoy the following 2 articles, one by Steve Veatch and the other by "yours truly". Remember, if you have general or specific questions about minerals, fossils, or anything else of interest, please send them in. We have many talented members who could be prevailed upon to write a short article. We could especially use some articles about gemstones/lapidary and fossils. Also, **please let me know if the newsletter stresses your computer connection**. I'm slowly increasing the amount of content until somebody complains.

Dryopteris: *A Fossil Fern from Florissant* Steven Wade Veatch

Ferns are among the fossil plants found in the Florissant Fossil Beds of Colorado. Fossil plants like these ferns are records of prehistoric life—providing information about when an organism lived, where it lived, and how it lived. Fossils are vital in helping paleontologists reconstruct ancient environments and establishing the geologic history of the Earth.

The origins of ferns are not well understood (Kendrick and Davis, 2004), but continued study of fossil ferns may reveal more about their beginnings. The earliest recognizable ferns come from the Carboniferous (359-299 million years ago).

Ferns have large, complex fronds (leaves) and are spore bearers. Some ferns are non-woody, but other ferns are woody and are called tree ferns. Ferns were common late Paleozoic plants and were widespread in the Mesozoic. Today, ferns are the most common and diverse spore-bearing land plants with over 10,000 species (Lane, 1992). They generally live in moist, shady areas of the forest understory.

Dryopteris, from the Greek, *drus* (oak) and *pteris* (fern), occurs in Florissant's Eocene fossil flora as well as other Tertiary floras. Its common name—wood fern—is from the preferred woodland habitat of most *Dryopteris* species. Other common names include shield fern, Goldie's fern, male fern and buckler fern.

Today, *Dryopteris* is a genus of about 250 species of ferns growing in the temperate Northern Hemisphere and in eastern Asia. Fronds are bipinnate (branching of leaflets at right angles to the central axis). The leaflets, or pinnules, are lobed. Fertile pinnules have round sori, which are fruit dots or reproductive bodies (Tidwell, 1998). Many of the species have solid rootstocks forming a crown with a ring of fronds.

Off all the fossil ferns at Florissant, *Dryopteris guyottii* is the only species of fern described from a frond. Other ferns are known only from fossil spores (Meyer, 2003). It



Figure 1. *Dryopteris guyottii* was abundant in past geologic ages. Broad, flat leaves helped the fern catch more sunlight. Florissant Fossil Beds National Monument specimen number 3135a. Photo by R. Wood.

appears that *Dryopteris guyotti* grew in the understory of the Eocene forest at Florissant (preferring damp and shaded environments like its modern relatives) or near ancient Lake Florissant.

Table 1. Taxonomy	
Kingdom	Plantae – Plants
Division	Pteridophyta – Ferns
Class	Filicales
Order	Aspleniaceae
Family	Dryopteridaceae – Wood Fern family
Genus	<i>Dryopteris</i>
Species	<i>Dryopteris guyotti</i> (Lesquereux)

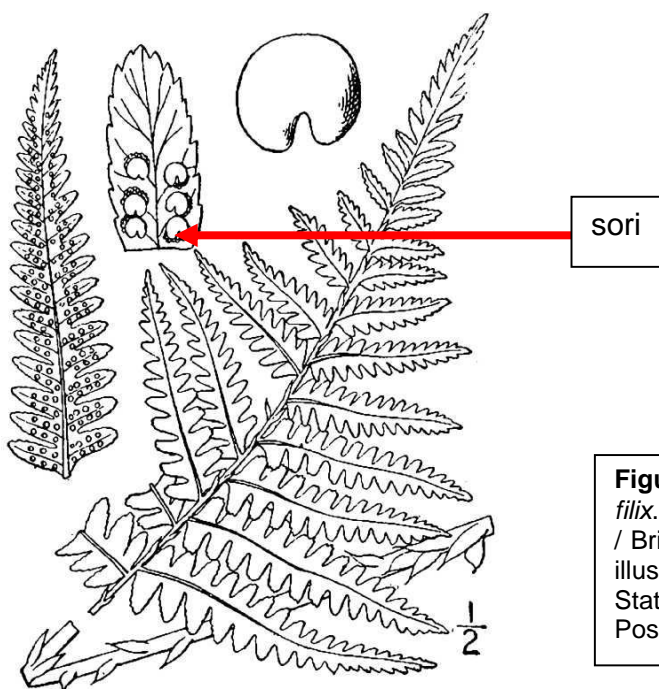


Figure 2. Line drawing of *Dryopteris filix*. USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions. Vol. 1: 21.



References Cited:

Kendrick, R. and Davis, P., 2004. *Fossil Plants*, Smithsonian Books, Washington, D.C. 216 p.
 Lane, N.G., 1992. *Life of the Past*, MacMillan Publishing, New York. 334 p.
 Lake George Gem and Mineral Club

June, 2009

Meyer, H. M., 2003. *The Fossils of Florissant*, Smithsonian Books, Washington, D.C. 258 p.

Tidwell, W.D., 1998. *Common Fossil Plants of Western North America*, Smithsonian Institution Press, Washington D.C. 299 p.

AJAX MINE, Victor, Colorado **By Bob Carnein**

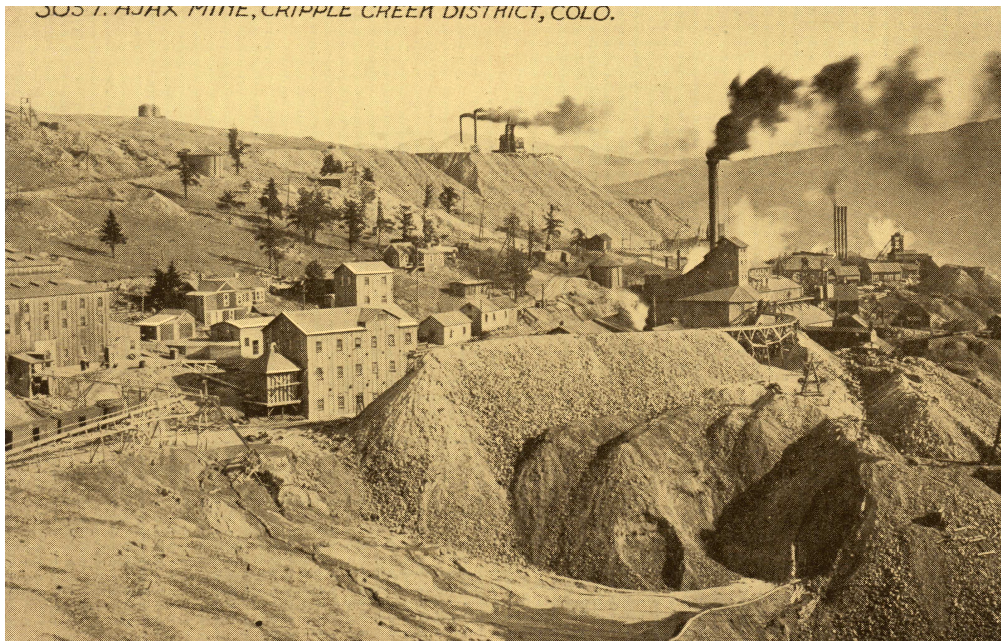


Figure 1. An early postcard showing the Ajax mine (Carnein collection)

The Ajax Gold Mining Company was incorporated in 1894, with main offices at 14 North Nevada Ave., Colorado Springs. E.A. Colburn was President, J.E. McRay Vice President, and C.H. Dudley Secretary & Treasurer, and the company was capitalized with stock valued at \$100,000 at \$1.00 par value (Hills, 1900). In 1900, it occupied 28 acres in the SW $\frac{1}{4}$ Sec. 29, on the south slope of Battle Mountain, just north of and overlooking Victor (Lindgren and Ransome, 1906). By 1906, the Ajax Gold Mining Company of Denver was capitalized at \$1.5 million and included the Apex, Monarch, Mammoth, Pearl, Champion, June Blizzard, Victor Consolidated, Victor Consolidated No. 2, Hallett & Hamburg, Necessity, Orpha Nell, Jolly Tar, Lucky Dick, and Gee Mima claims (Figure 2; Lindgren and Ransome, 1906).

Ore was similar to that of the nearby Portland, Strong, and Independence mines. Mineralization was concentrated along the steeply dipping contact between altered granite and volcanic breccia (Lindgren and Ransome, 1906). Ore occurred in bodies varying from fissure fillings less than one inch thick to sheeted zones as much as 100 ft. wide. The vein system was exposed over a vertical range of more than 3000 ft. with virtually no change in ore grade or mineralogy (Thompson, *et al.*, 1985).

During its 90-year life, the mine produced about 700,000 ounces of gold from ores averaging 0.6 to 1.04 ounces per ton (Thompson, *et al.*, 1985). Production began in 1895 but ceased

during World War II. After the price of gold was freed from government control in 1972, Golden Cycle Corp. began to rehabilitate the mine in 1973, sinking its shaft to 3350 ft. below the collar (the deepest shaft in the Cripple Creek district). Golden Cycle and Texasgulf formed a joint venture (that became the Cripple Creek & Victor Gold Mining Co.) in 1976 to explore the district. Deep mining ceased in 1984, but the property was incorporated into the present AngloGold operation through various mergers and consolidations ending in 1999. At present, AngloGold Ashanti has no plans to reopen the mine (Tim Brown, personal communication, 2009).

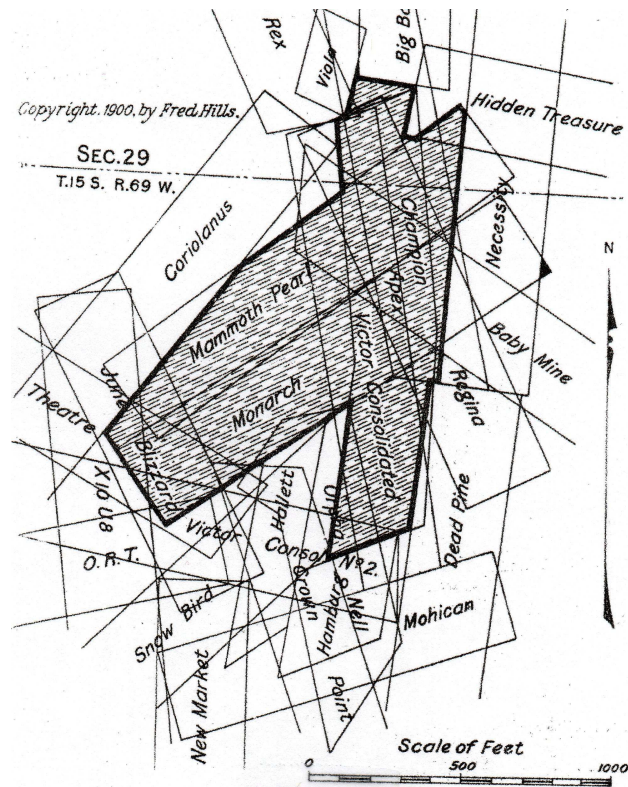


Figure 2. Claims included in the Ajax Gold Mining Co., as of 1900. (Hills, 1900)

References Cited

Hills, F., 1900, *The Official Manual of the Cripple Creek District, Colorado, U.S.A.*, Volume 1: published by F. Hills, 495 p.

Lindgren, W., and F.L. Ransome, 1906, *Geology and gold deposits of the Cripple Creek district, Colorado*: U.S. Geological Survey Professional Paper 54, 516 p.

Thompson, T.B., *et al.*, 1985, *Mineralized veins and breccias of the Cripple Creek district, Colorado*: *Economic Geology*, vol. 80, no. 6, p. 1669-1688.

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 30 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**

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:

John Rakowski, President
PO Box 608
Florissant, CO 80816
719-748-3861
rakgeologist@yahoo.com

Wayne Johnston, Treasurer
207 Cooper Lake Drive
Divide, CO 80814
719-687-6067
wjohnston719@msn.com

Dan Alfrey, Vice President
PO Box 4164
Woodland Park, CO 80866
719-440-6234
alfreydan@aol.com

Rebecca Blair, Secretary
117 Yucca Creek Rd.
Divide, CO 80814
blairra@hotmail.com



C.R. (Bob) Carnein, Editor, 507 Donzi Trail, Florissant, CO 80816
ccarnein@lhup.edu; 719-687-2739

Lake George Gem and Mineral Club

June, 2009