



Friends of the Florissant Fossil Beds Newsletter

Volume 2006, Issue 2

May, 2006

Inside this issue:

Theodore Dru 2

Alison Cockerell

Crystal Donation 2

Aerial Photo of
Ancient Lake
Florissant 3

Rocky Mountain
Bird Observatory 3

Applied Environ-
mental Education
Program 4

Support of Educa-
tion and Research 4

A Short Note On: Fossil Spiders from Florissant



By **Steven Wade Veatch**

The order of Araneae (true spiders) are represented as a large and diverse group in the 34.1 million-year-old Florissant Formation. Spiders were among the earliest animals to live on land. They are thought to have evolved about 400 million years ago from primitive ancestors that emerged from water to live on land. Spiders are arachnids—not insects, however both spiders and insects belong to the largest group of animals on Earth, the arthropods.

Florissant is well-known for its fossil spiders. More than 150 specimens of spiders have been found in the Florissant shales (Kinchloe, 2003). Toni Clare, owner of the commercial quarry north of the Florissant Fossil Beds National Monument, col-

lected the specimen shown in figure 1 in 1997. When spiders die their legs normally curl under their body (Meyer, 2003).



Figure 1. This Eocene-age fossil spider is a male, based on the swelling of the pedipalps. Many fossil spiders are impressions that are barely discernable. Florissant Fossil Beds National Monument specimen number 2971A. Photo: R. Wolf.

Florissant spiders, including the specimen in figure 1, have their legs extended, rather than curled up. It has been argued that the extended legs of Florissant's spiders suggest the waters of an ancient Lake Florissant, during the latest Eocene, were warmer or more acidic than normal: the likely cause may have been from thermal vents associated with area volcanism or from ash falls (Meyer, 2003).

It is difficult to assign Florissant's fossil spiders to a genus and species based on their

(Continued on Page 5)

What's in a Name?

By **Harv Burman**, Ranger, Florissant Fossil Beds National Monument

I've been on this wonderful planet called earth for sixty years and I've learned a lot of things. I've learned the names of lots of animals, birds, plants, and people. When I learn a name I like to think that I can store it in the permanent section of my brain

for retrieval later. Since becoming a park ranger, I've had to retrieve many of these permanent names and change them, because I found they weren't quite correct. For instance, early in my life I learned to identify a magnificent mammal native to North America, including Colorado, called the "buffalo." Now I find that we don't have any "buffalo" here but rather bison.

The American bison (two varieties, the plains bison and the woods bison) are not true buffalo but belong to the bovine family (which includes domestic cattle). The term bison differentiates them from the Asian water buffalo and the African Cape buffalo. Early on in the colonization of the New World, they

(Continued on Page 6)

Theodore Dru Alison Cockerell: Naturalist, Humanitarian, Teacher

By Melissa Barton, Museum Aide

"My wife was particularly anxious to find a fossil butterfly," wrote Theodore Dru Alison Cockerell in 1908, "and often as we went out to work, we asked, would this be the day to yield the coveted treasure?"

Toward the close of the second season, Wilmatte Porter Cockerell, T.D.A. Cockerell's second wife, found the longed-for butterfly: a magnificent specimen "yielding place only to [Samuel] Scudder's *Prodryas persephone*," according to Cockerell.

Cockerell's expeditions to Florissant in 1906-1908 were long anticipated. He first learned of Florissant when he was living in Westcliffe, Colorado as a young man, like many other Englishmen seeking respite from tuberculosis. In 1889, he wrote to his sweetheart Annie Fenn, about Scudder's paper on fossil insects, which described the fossil beds at Florissant.

"Charlton was talking about it yesterday," he said, referring to a chemist friend of his, "and he is very anxious to go there. He seems to want me to go with him. It would be an interesting trip."

Cockerell's letters from that period say little else about Florissant, and he does not seem to have visited it until the 1906-1908 expeditions arranged by the University of Colorado in cooperation

with other museums. At that time, Cockerell and his wife Wilmatte were living in Boulder. Cockerell had spent time in England, Jamaica, and New Mexico previously; his first wife, Annie, had died following the birth of their son, Martin.

Although sometimes criticized for his rush to publish results, Cockerell was a prolific writer and naturalist who produced over 130 scientific papers on the hundreds of Florissant fossils he helped collect. Although his particular research interests were bees and beetles, Cockerell found nothing in nature uninteresting – one of the finest specimens found during the 1906-1908 expeditions was the first "really recognizable moss ever found fossil in America."

A true Renaissance man, Cockerell's gravestone in Boulder is marked with the inscription "Naturalist – Humanitarian – Teacher."

Florissant Fossil Beds National Monument will commemorate the centennial of Cockerell's 1906 expedition to Florissant on June 10, 2006, with speakers and a field trip to some of Cockerell's collecting localities. Florissant Fossil Beds National Monument, The Friends of Florissant Fossil Beds, and the University of Colorado are cosponsoring the event.

Key Addition to Pikes Peak Historical Society Museum



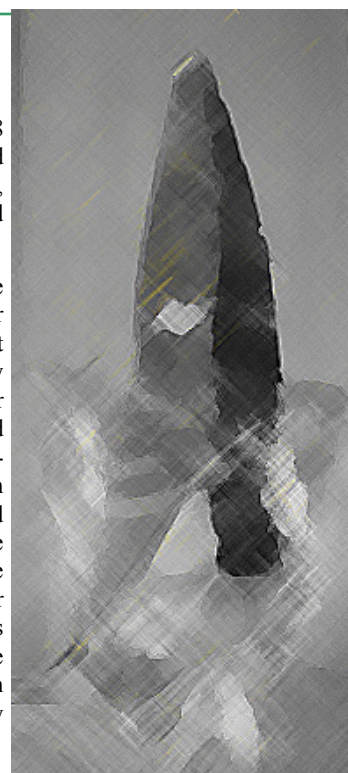
Rich Fretterd, Godsend Mine owner, is seen with one of his large crystals.

The mineral collection at the recently established Pikes Peak Historical Society museum in Florissant keeps getting better and better.

Last year, the Lake George Gem and Mineral Club launched a "legacy project", intended to help establish the best collection of Pikes Peak back-country minerals found in any public forum in the region. The Pikes Peak Historical Society museum was selected as the best repository for the minerals. During 2005, 46

donations were made by 18 individuals. These included specimens from Teller, Park, Fremont, Chaffee, and Douglas Counties.

On March 26, 2006, the museum received a major new addition: the largest smoky quartz crystal (by weight and volume) ever discovered in the United States! This superb specimen is on loan from Rich Fretterd, a local miner and surveyor. It comes from the Holy Moses Pocket of the Godsend Claim, Teller County, about six miles north of Florissant. The pocket was discovered on Groundhog Day, February 2, 2002.



(Continued on Page 6)

Aerial Photo Shows Outline of Ancient Lake Florissant

By Steven Wade Veatch

Just west of Pikes Peak and south of the town of Florissant, Colorado (about 40 miles west of Colorado Springs on U.S. Highway 24) lies a scenic mountain valley where a number of petrified redwood stumps dot the landscape. Beneath this beautiful setting are incredible plant and insect fossils buried in the sediments of an ancient lake. These fossils, ranging from large tree stumps to single-celled diatoms, reveal a prehistoric Colorado of long ago. Today the Florissant Fossil Beds National Monument protects these fossil resources.

About 34 million years ago, volcanic eruptions near Guffey (18 miles to the southwest) produced volcanic mudflows (water-

saturated mass of ash and rock debris). These mudflows—looking and flowing like concrete—buried a lush valley and petrified the bases of huge redwood trees that grew there. These mudflows also created a dam in the valley, forming a lake about one mile wide and 12 miles long. Volcanic ash from subsequent eruptions formed fine-grained sediments at the bottom of the lake. Plants, insects, and other organisms were entombed in this material. Over millions of years these sediments were compacted into layers of shale. The delicate details of these organisms were preserved as fossils and provide a look at the life and the prehistoric ecosystem of the Florissant valley during the end of the Eocene Epoch.

(Continued on Page 6)

Rocky Mountain Bird Observatory

Education and Bird Banding Stations

Families, classrooms, scout troops, home-schoolers, and adult groups are invited to get close to migratory songbirds by taking part in one of our migration station field programs. Educators will lead you on a short hike to the banding station, teaching you about the ecology of stopover habitat. While researchers handle birds captured harmlessly in nets, you will learn about bird banding, bird adaptation, migration, and the challenges these birds face during their journey.

What to bring:

Water, snacks, binoculars, field guide, mosquito repellent, and camera.

When:

August 20 - October 31, 2006, Barr Lake State Park, Early September, Grand Junction

Please see details below:

Barr Lake State Park

The Education and Bird Banding Station at Barr Lake State Park is the longest running and first of RMBO's stations. RMBO began banding birds and educating visitors about the wonders of birds at this site in 1988 and we have banded consistently during the fall migration at Barr Lake for every year since.

To visit the Education and Bird Banding Station at Barr Lake State Park, take Bromely Lane East of Brighton to Piccadilly. Head south on Piccadilly and look for signs to the entrance to the Park. Go to the Nature Center, where you can access the Shoreline Trail which circles the lake. The banding site is about ¼ mile from the bridge and parking lot on the Shoreline Trail; look for signs.

This banding station will operate in Fall 2006.

For more information on Barr Lake Banding contact: Amanda.Morrison@rmbo.org or 303-659-4348 ext. 6#.

Audubon Society's Ela Wildlife Sanctuary - Grand Junction

To visit the Education and Bird Banding Station in Grand Junction, Exit I-70 at Horizon Drive (exit 31). Take Horizon Drive west (really southwest) to its end at 7th street. Take 7th street south (left turn off of Horizon) to Grand Avenue. Take Grand Avenue west (right turn off of 7th Street) to the Monument Road / Power Road intersection. Turn right (north) onto Power Road. Stay right at the first bend in the road, and the road will become Dike Road. Follow the signs to Connected Lakes State Park. The banding station is the wildlife blind with the green roof on the right (north) side of Dike road just before entering Connected Lakes State Park. There is parking before reaching the blind, at the future site of the Grand Valley Audubon Society Nature Center.

To schedule an education program or for more information, please contact Stan Johnson at 970-255-6191.

This banding station will operate in Fall 2006- early September.

Applied Environmental Education Program

This 11-week on-line course entitled "Applied Environmental Education Program Evaluation," will be offered this fall (September 18 – December 1, 2006) through the University of Wisconsin-Stevens Point.

The course is designed to assist environmental educators and natural resource professionals in evaluating their education programs. Participants have the opportunity to develop and apply skills in designing evaluation tools such as surveys, observation forms, and interview and focus group guides. This course was developed as a cooperative effort between the Environmental Education and Training Partnership (EETAP) at the University of Wisconsin-Stevens Point and the U.S. Fish and Wildlife Service (FWS) National Conservation Training Center. Participants may obtain three undergraduate or graduate credits from the University of Wisconsin-Stevens Point. All participants, regardless of location, are eligible for the in-state tuition rate. The course is also offered as a non-credit workshop

for those who are not seeking college credit.

"I loved the way the course content was laid out. The units and course content flowed together very well. The course also provided me with ways to test/assess our programs and show results, conclusions, and recommendations in a legitimate way." – Fall 2004 AEEPE course participant

For more information, please visit www.eetap.org and click on "Online EE Courses" or contact Angela Arkin (Angela.Arkin@uwsp.edu) for a registration form.

Please act quickly the preference registration deadline for the fall course is **August 18, 2006**.

Partnership Support of Education and Research in Geology and Paleontology

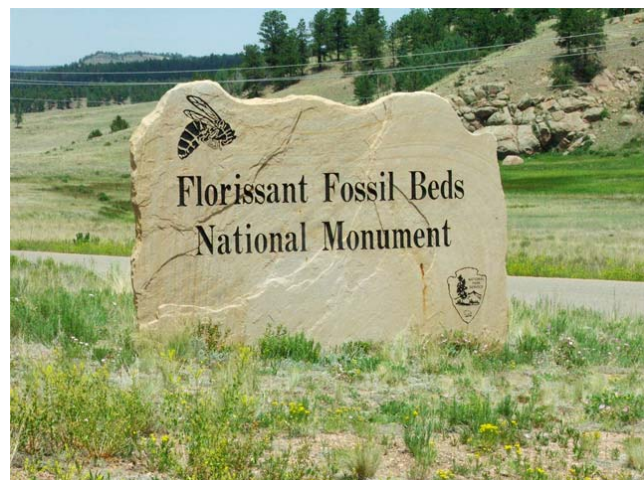
By Steve Wade Veatch, Friends of the Florissant Fossil Beds, Inc., P.O. Box 851, Florissant, CO 80816, sgeoveatch@att.net

The Friends of the Florissant Fossil Beds, Inc. was organized in 1987 as a 501(c) (3) non-profit organization by a group of dedicated individuals interested in assisting the National Park Service in its mission to preserve and protect the natural and cultural resources of Florissant Fossil Beds National Monument. As the official private sector partner to the Monument, the Friends is a membership organization that raises funds from members, individuals, corporations, other non-profit organizations, and foundations to assist the Monument in meeting its mission. Generally, Friends' groups work with national parks to preserve, restore, and enhance natural and cultural resources, provide improved services and facilities, and increase visitor awareness and support of the park.

Editors note: Steven Veatch presented a paper at the 7th Federal Fossil Conference "Preserving America's Public Fossils", in Albuquerque, New Mexico last month. The conference was held on May 22 through May 24, 2006. The abstract of the paper is printed above.

The conference was sponsored by Bureau of Land Management, National Park Service, and US Forest Service and hosted by the New Mexico Museum of Natural His-

tory in celebration of the 100th Anniversary of the Antiquities Act, (PL 59-209, 1906) the first federal legislation establishing protection and preservation of American Antiquities. Papers were presented on the management, protection, interpretation, and study of public fossil resources.



The Fossil Conference served as a forum for Federal, Provincial and State land managing agencies to present work related to management of these important public resources.

Spiders (Continued)

external features observed in the paper shales. Since microscopic characteristics cannot be seen in the fossil impressions at Florissant, an outline morphometric study, using carapace (dorsal exoskeleton) shape and leg characters, has been effective in making family placements of fossil spiders (Kinchloe, 2004).

All spiders have two well-divided body sections: the cephalothorax (prosoma) followed by an abdomen (opisthosma) (Grimaldi, 2005). The abdomen contains the digestive and reproductive systems and on the ventral surface near the apex are spinnerets that deliver small threads

Differences Between Spiders and Insects		
Feature	Spiders	Insects
Main body parts	2	3
Walking legs	8	6
Eyes	Simple	Compound
Jaws	Piercing (fangs)	Chewing
Antennae	No	Yes
Ability to fly	No	Most
Abdominal silk spinning organs	Yes	No

Table 1. Basic differences between spiders and insects.

Spiders were once a part of an ancient ecosystem at Florissant that has long since vanished, the only record of it is held in the fossil beds. Some of the spiders that lived there built elaborate webs, several built tunnel-like lairs under rocks or under the dead leaves littering the primeval forest floor, while others lived on rocks or trees. Some of the spiders ultimately turned into fossils. More exciting discoveries of these remarkable fossils will no doubt occur and add to our understanding of this prehistoric ecosystem and these interesting creatures.

References Cited:

Grimaldi, D and Engler, M. S., 2005, The evolution of insects:

New York, Cambridge University Press, 689 p.

Kinchloe, A. E., 2003, A taxonomic study of the Eocene spiders from Florissant, Colorado: Geological Society of America Abstracts with Programs, v 35, no. 6, p. 537.

Kinchloe, A. E., Smith, D.M., Cushing, P. E., and Gurlalnick, R., 2004, A morphometric study of the Eocene spiders of Florissant, Colorado: Geological Society of America Abstracts with Programs, v 36, no. 5, p. 40.

Meyer, H.W., 2003, The fossils of Florissant: Washington, D.C., Smithsonian Books, 258 p.



Figure 2. Yellow Garden Spider (*Argiope aurantia*), Wellington, Kansas. Photo: © 2003 Joseph Hall.

of silk. Silk has many functions such as making intricate webs that capture prey, encasing eggs, and building elaborate nests or burrows. Spiders with a distinctive silk organ, called a cribellum, are included in a

special group called the Cribellatae. The fossil spider in figure 1 has a cribellum and belongs to this group (Rasnitsyn, personal communication, 2006).

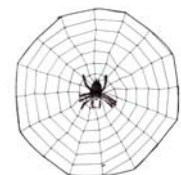
Spiders have eight walking legs, all attached to the cephalothorax. On the front of the cephalothorax are the mouth, fangs to bite prey with, and eyes. The first pair of appendages—the chelicerae—are used for piercing, handling prey, and injecting venom. The second pair of appendages, the pedipalps, are used for mating and are much larger in male spiders than in females.

All species of spiders are predatory—spiders that do not spin webs, such as wolf spiders and tarantulas, stalk or ambush their prey. Spiders feed by a process known as external digestion. When spiders catch an insect, they inject venom that paralyzes their prey. The spider’s venom also contains digestive enzymes. These enzymes liquefy most of its victim’s insides so the spider can feed on this mixture of nutrients.

Taxonomic Classification

Phylum	Arthropoda
Class	Arachnida
Order	Araneae (spiders)

Table 2. The specimen in figure 1 has not yet been classified beyond the order. It is difficult to classify some of Florissant’s fossil spiders into higher taxonomic categories.



What's in a Name (Continued)

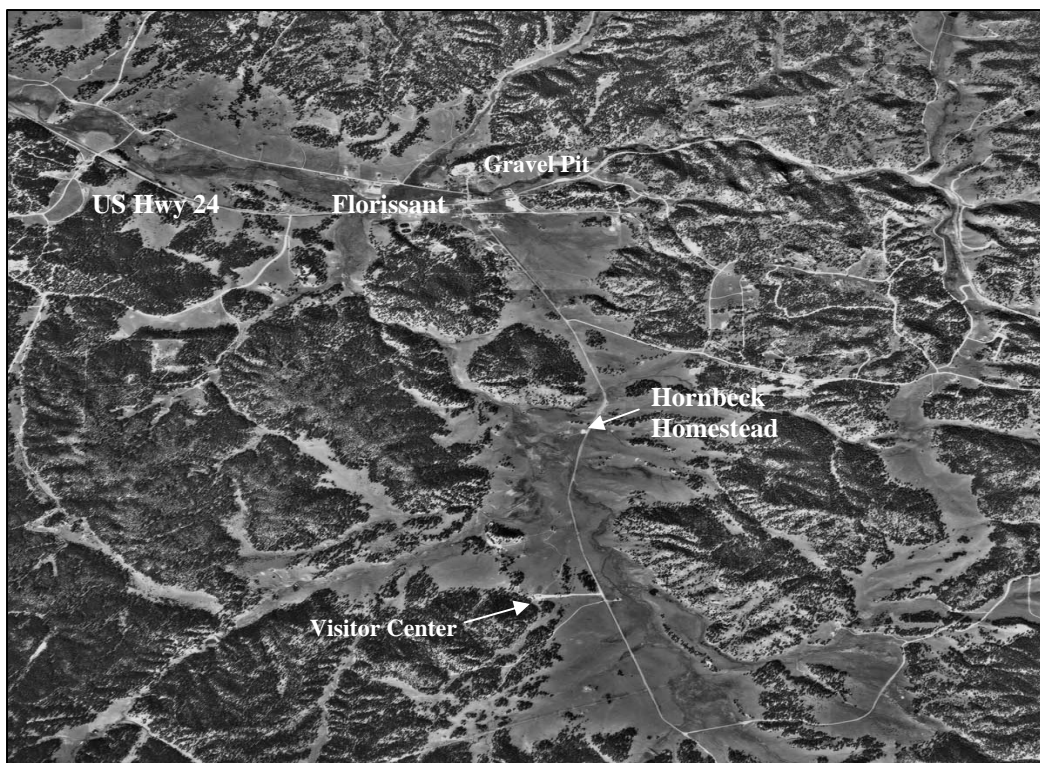
were misnamed buffaloes. This name, derived from the Latin-based Romance languages, had been applied to an Old World mammal such as the water buffalo. That's not all bad, however, because somehow Bison Bill Cody just doesn't have the same romantic sound as Buffalo Bill Cody.

Another one of those "permanent" names that I have had to re-learn is "elk." We all are familiar with a Colorado native known as elk; however, they really are not elk. Rather they are wapiti (Shawnee for "white rump"). To pronounce the name, think, "Hippity, hoppity, whoppity!" Elk is the European name for an animal that we call moose (Native American for "He who eats bark"). That's another case of early mistaken identity that stuck.

Buzzards! We all know what a buzzard is. Or do we? Buzzard is taken from the word "buteo," which is the word for a group of soaring, broad-winged, broad-tailed raptors, or birds of prey. Red-tailed hawks, for instance, are buteos, or buzzards. The turkey vulture that we see soaring magnificently around here is not a buzzard. To add to the confusion, New World vultures, which include our turkey vultures, used to be called raptors, or birds of prey. They are now classified as part of the stork family.

Pronghorn antelope aren't antelope. Nighthawks aren't hawks. Hamburgers are made from beef, not ham. Are you confused yet? If not, let me know and I'll write more until you are!

Aerial Photo (Continued)



The approximate area of ancient Lake Florissant is defined in this aerial photo by meadows and treeless sections. The prehistoric lake area (light gray) is seen extending through the center of the photograph and then turns west at the town of Florissant. NAPP black and white vertical aerial photo from 20,000 feet (9/29/1999). Top of the photo is north.

Pikes Peak Historical Museum (Continued)

This crystal, 4 feet long and weighing 439 pounds, is doubly-terminated, having points on both ends. The specimen includes some of the original matrix material it was attached to, part of the pocket edge. This lighter colored material is composed of graphic granite and microcline feldspar.

When this crystal was found, only a few inches at its tip were visible. It was initially assumed to be much smaller. After careful exposure of the entire crystal, a block and tackle system,

hooked to a tripod, was necessary to extract this behemoth from its original site.

Visit the museum in Florissant across from Park State Bank and check out the entire mineral collection. Hours are 10AM-4PM, every day except Sunday and Tuesday. Admission is free. If you have questions about the mineral collection, call Andy Weinzapfel (719) 748-3356.

Florissant Fossil Beds

National Park Service
U.S. Department of the Interior

Florissant Fossil Beds
National Monument



Summer Seminars Series and Fees

Florissant Fossil Beds National Monument offers one or two-day seminars in a variety of geology, biology, humanities, and paleontology courses. The regular fees for each seminar are \$50.00 per person for a one-day seminar and \$65.00 for a two-day seminar. Reduced rates are available for members of the Friends of the Florissant Fossil Beds, Inc. (See section on Friends group below). A special rate is available for teachers who join the Friends of the Florissant Fossil Beds and sign up for seminars between May 1 – May 15, 2006. This can be by phone or mail postmarked by May 15th, 2006. This special rate is \$30.00 for a one day (1/2) and \$40.00 for a two day seminar.

Upon registration, participants will receive a seminar information packet. Registration information will be available on the Monument's website after April 15th, 2006 at <http://www.nps.gov/flfo> and go to the link for Education Programs.

Teacher Friendly Graduate Credit

Teachers can earn graduate credits through the Division of Extended Studies of Adams State College. Adams State charges \$22.50 for a 1/2 graduate credit (one-day seminar), and \$45.00 for 1 graduate credit (two-day seminar). BOCES recertification credit is available for \$5.00 for 1/2 credit, and \$10.00 for 1 credit. (No discounts are available for tuition).

Friends of the Florissant Fossil Beds N.M.

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. A one-year, individual membership to the Friends is \$15.00 and a one-year, family membership is \$27.00. Seminar discounts are only available to current members or those who join with their seminar registration. If you are no longer a member, you may wish to renew. Remember, if you are a teacher AND a Friend member AND you register early (See first section) you get a special rate of \$30.00 for a one day seminar and \$40.00 for a two day seminar.

Schedule

June 3, 2005	9 - 5	Ancient Life and Landscapes of the Florissant Valley	Herb Meyer
June 17, 2006	9 - 5	Flintknapping: Making and Understanding Stone Tools	Craig Ratzat Jeff Wolin
June 24, 2006	9-5	Basement Geology of the Florissant Region	Bud Wobus
July 8, 2006	9-5	Teacher Workshop The Worth and Wonder of Words	Gregory Denman
July 15 - 16, 2006	8 - 5:30	Geologic History of the Goldbelt Byway	Herb Meyer Woody Henry Steve Veatch
July 22, 2006	9-5	Focusing on Exceptional Nature Photographs	Kevin Snyder
July 23, 2006	9-5	Ecology and Conservation of Forest Birds in the Pikes Peak Region	Brian Linkhart
August 5, 2006	9-5	Geology Wonders of South Park	Don McGookey
August 12, 2006	9-5	Teacher Workshop: Teaching with National Parks	Jeff Wolin Carol Stansfield Jonathan Wuerth Val Brown
August 19 th , 2006	9-5	Geology and History of the Cripple Creek Mining District	Steve Veatch David Vardiman
September 9, 2006	9 - 5	Living with Fire in Front Range Forests	Wayne Sheppard

Contact Information

For more information about prices, logistics, registration, or any other questions, please look at our website: <http://www.nps.gov/flfo> and go to the link for Education Programs. You may also contact Jeff Wolin at (719) 748-3253 or fax at (719) 748-3164 or email at jeff_wolin@nps.gov or send a letter to PO Box 185, Florissant, CO 80816.

REGISTRATIONS WILL NOT BE TAKEN UNTIL AFTER MAY 1st, 2006

The seminar series is sponsored by the Friends of Florissant Fossil Beds, Inc.



Advertising Rates

Business Card Size:	\$6.00
¼ Page	\$12.00
½ Page	\$24.00
Full Page	\$48.00

You may submit advertisements to: Steven Veatch, P.O. Box 5938, Woodland Park, CO 80866 or via email: sgeoveatch@att.net

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**We're on the Web!
See us at:
www.fossilbeds.org**

Email Addresses Wanted

Please send your current email address to sgeoveatch@att.net. This will allow us to send you reminders of events and important news items as they occur.

Please provide us with feedback on the newsletter or any topic you are interested in. We would also like to know who is interested in serving on various committees or on the Board. You can reach us at the address to the left or by email at sgeoveatch@att.net.

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Send contributions via email as a Word document or in rich text format to Steven Veatch at sgeoveatch@att.net

The Friends of the Florissant Fossil Beds newsletter is published quarterly by the Friends of the Florissant Fossil Beds and is governed by the by-laws of the Friends. Articles appearing in the newsletter do not necessarily reflect the views of the National Monument, officers, members, or sponsors of the Friends.

About Our Organization...

In 1987, the Friends of the Florissant Fossil Beds, Inc. was organized by a group of dedicated individuals interested in assisting the National Park Service in its mission to preserve and protect our national treasures. As a non-profit organization, the Friend's mission is to secure resources to help preserve the fossils and promote programs activities that enhance the Monument's educational, research, and scientific objectives.

Friends' groups help many of the National Park service areas in a variety of ways. Membership fees and donations to the Friends of Florissant Fossil Beds are used for:

- Environmental education programs
- Field seminars
- Year-round interpretive programs
- Jr. Ranger programs
- Paleontological and geological resources
- Natural history resources
- Publications

Past accomplishments and ongoing support by the Friends of Florissant Fossil Beds includes:

- Major funding of the yurt shelters
- Travel and research funding for the Monument's paleontologist
- Assistance in the purchase of an all-terrain wheelchair for handicapped visitors
- Financial support for the University of Denver's (fossil data) Digitization Project
- Purchase of furniture for the seasonal rangers and intern housing
- Funding for other special Monument related celebrations and special events (such as the dedication of the new stump exhibit area May 11, 2002)
- Planning, funding, and coordinating the Monument's 30th Anniversary Celebration (1999) and 35th Anniversary Celebration (2004)
- Funding for the Monument's newspapers each spring
- Funding and coordination of annual Summer Educational Seminars Program

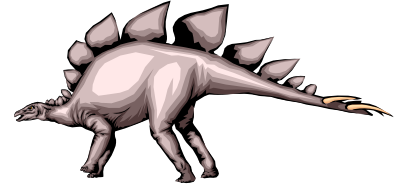
Cripple Creek Park and Recreation Department Presents A Geoscience Adventure Class

Field Studies in Paleontology: Exploring the Shelf Road From Cripple Creek to Garden Park, Colorado



July 15, 2006

Hot Science
cool Programs!



Starting in Cripple Creek, this outdoor-based class offers an unsurpassed opportunity to explore the geological and paleontological wonders along the Shelf Road. The class will begin with a brief discussion of area mining, rocks, minerals, and fossils. The group will then set off for points south to explore geological features spanning millions of years. The field trip down the Shelf Road is a perfect route to investigate rocks, an ancient seabed, and incredible fossils. Participants will follow the old wagon roads used to haul dinosaur bones from Garden Park to Cañon City, explore a site where dinosaur bones were quarried, visit the paleontology lab at the Dinosaur Depot in Cañon City, and investigate nearby dinosaur tracks.

- Participants will board a park and recreation bus and begin exploring the back country of Cripple Creek, view the Cresson Gold Mine, and then travel down the Shelf Road with many stops and photo opportunities.
- The basics of paleontology will be reviewed while in the field.
- Collection techniques and field photography will be demonstrated.
- Participants can collect fossils at several stops.
- Regional geology will be reviewed from overlooks in the area.
- Several archaeological sites will be examined along the way.
- This class is perfect for teachers K-12 (recertification credits: 0.5 semester credit hour available through the Colorado School of Mines for additional fee (\$30.00) payable at start of the class).

Date: July 15, 2006

Time: 8:30 to 5:30 pm

Place: June Hack Community Center in Cripple Creek

Fee: \$55.00, includes admission to the Dinosaur Depot in Cañon City, expedition notebook, field guide, a digital database to record your fossil collection in, and transportation from Cripple Creek to field sites.

Register: Call Cripple Creek Park and Recreation at 719-689-3514 today. This class will fill quickly. Please bring a sack lunch to enjoy. The bus will return to Cripple Creek around 5:30 p.m. If you wish to stay after class, Cripple Creek offers many interesting diversions.

FRIENDS OF THE FLOISSANT FOSSIL BEDS
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