

Friends of the Florissant Fossil Beds, Inc.

The Friends of the Florissant Fossil Beds, Inc. is a non-profit organization comprised of people just like yourself who are strongly dedicated to supporting Florissant Fossil Beds National Monument through a number of dynamic, innovative, and creative programs. All proceeds assist the Monument in protecting the world-class fossils and educating the public about their significance. A vital aspect of the partnership between the Monument and the Friends organization is that of promoting educational opportunities through field-based, experiential seminars. These seminars feature outstanding instructors who are recognized experts in their fields. We invite you to join us and take part in a lifelong process of learning and discovery.

Contents:

Fees, refunds, cancellation information	2
How to register	3
Things you should know	4
Seminar descriptions	5-6
Adam's State graduate credit form	7
Seminar registration from and Friends membership form	8

Fees and Tuition

Friends' Seminar Fees

\$50.00 fee for each I day seminar
\$65.00 fee for the 2 day seminar (can be taken for I or 2 days with associated credit)
\$80.00 fee for the 3 day seminar (can be taken for I,2, or 3 days with associated credit)
\$40.00 discounted fee for current member of Friends, I day
\$55.00 discounted fee for current member of Friends, 2 day
\$70.00 discouted fee for current members of Friends, 3 day

Adams State College Graduate Credit Tuition

\$22.50 tuition for I/2 credit per I day, 7.5 hour class \$45.00 tuition for I full credit per 2 day, I5.0 hour class \$67.50 tuition for I.5 credits per 3 day, 22.5 hour class Please note that you must attend the entire 7.5 hour day to get credit.

Boces Recertification Tuition

\$5.00 recertification credit through the Pike's Peak BOCES of Colorado Springs

Teacher Discount:

Teachers who join the Friends of the Florissant Fossil Beds and sign up for a seminar by May 20 are entitled to a special rate for seminars which is \$30.00 for a one day and \$40.00 for a two day seminar and \$50.00 for a three day seminar.

Refund and Cancellation

We reserve the right to cancel any seminar if minimum enrollment is not met. We will make every effort to place participants in another seminar of their choosing or will return the registration fee and ASC tuition/BOCES fee. If you cancel your enrollment for any reason, the following policy will apply: refunds will be given for cancellations received up to one week prior to the seminar, minus a \$5.00 processing fee. No refund is given for cancellation less than a week prior to the seminar.

Disclaimer

- •The seminars are educational in nature. In any educational environment, all sides of various issues need to be examined and some of these may prove to be controversial. Views expressed are not necessarily those of the National Park Service, the staff, or Friends of the Fossil Beds, Inc., nor are they responsible for their content.
- •In most cases, books recommended will be available for purchase at the seminar, or the Rocky Mountain Nature Association bookstore at the Monument.

Registration Information

How to Register...

The following list will guide you through the registration process:

- I. The first step is to decide which course(s) you want to take, noting the fees for each seminar as outlined on Page 3. See course descriptions for more information about each seminar (See the next few pages).
- 2. You can receive discounts on seminars if you are a member of the Friends of the Florissant Fossil Beds, Inc. Are you a current member of the Friends group? Do you need to renew your membership? Would you like to join the Friends for the first time? If you are interested in getting immediate discounts, you can join the Friends with your registration. To join the Friends group, please read, fill out, and mail in the registration form for the Friends group at the back of this brochure along with your registration form for the seminars you would like to take.
- 3. Are you a teacher? Will you be taking this course for graduate credit through Adams State and/or recertification credit through BOCES? Note the prices for credits as outlined on Page 3. For each seminar that you want to receive graduate credit from Adams State, you must fill out and submit a separate Adams State graduate credit form that is available on Page 11, or online at http://www.nps.gov/flfo/education.
- 4. Once you have decided upon the courses, decide whether or not you want to join the Friends group, and decided whether or not you are taking the course for any kind of credit, you are ready to fill out the registration form on the back of the brochure and mail it in with your payment.
- 5. NOTE: You can also pre-register by phone. Call (719) 748-3253 ask for extension 109 and leave a message. Your phone reservation will be held for up to ten days without payment. Receipt of payment confirms your space in the seminar.

Taking a seminar for credit? READ THIS!

Please remember that for each seminar you want to take for graduate credit from Adams State, you must fill out a separate graduate credit registration form that is on Page II or online at http://www.nps.gov/flfo/education. Click on the link for seminar brochure.

Also note that you may not repeat a seminar for credit if you have previously taken and received credit for that seminar. Check titles and content carefully since one or two repeated classes may have a new title or description. Call us if you're in doubt. Adams State College tuition or BOCES recertification fee must be included with seminar registration and fees. Please write your check for the entire amount payable to **Friends of Florissant Fossil Beds, Inc.** We cannot accept credit cards in payment. Sorry.

Things You Need to Know Once You are Registered

How to get here:

- The Monument is reached from I-25 in Colorado Springs by taking State Highway 24 west approximately 35 miles to the town of Florissant. Turn south (left) on Teller County Road #1, proceeding about 2 miles where entrance road to the Monument is marked with a large sandstone sign on the west side of the road. Continue about 75 feet beyond the Monument entrance and turn right (west) onto a dirt road (there will be a sign on the gate). The ½ mile road ends at a parking area at an A- frame house called the Fowler Education Center.
- All seminars begin at the Fowler Education Center at 9 am and end at 5 pm UNLESS OTHERWISE NOTED. PLEASE READ ALL INFORMATION CAREFULLY. Several seminars may begin at a different time or will meet elsewhere. You are responsible for your transportation in reaching the starting point.
- Allow approximately I-hour drive from the west side of Colorado Springs, at least 2.5 hours from Denver. Seminars will begin on time. We ask that you arrange to arrive about 15 minutes before the start time to allow for check-in. Allow yourself plenty of time for a stress-free arrival.

What to bring and how to prepare:

• Most seminars will be outdoors for a large portion of the class and may require hiking. Be prepared for changeable mountain weather with layered clothing, rain gear, comfortable hiking shoes, hat, sunglasses and sunscreen. Insect repellent is a good idea. Meals are not provided, so bring a sack lunch, snacks, ample drinking water, and a plastic sack to carry away any refuse from your day. Bring a notebook and pen. You may wish to bring binoculars, camera, field lens, or any other items that would enhance your experience.

Seminar Descriptions 2008

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 14, 2008, 9 – 5, Spider Biology and Natural History, Dr. Paula Cushing (DNMS)

Are you afraid of spiders but also fascinated by them? Are you considered odd by your friends because you love spiders? Either way, this class is for you. Cushing is the president of the American Arachnological Society. She will discuss the relationship between spiders and their closest relatives, provide information about their biology, their importance in terrestrial environments, and their ecology and behavior. You will also learn how to identify spiders in the field and in the laboratory.

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).

June 28, 2008, 9 – 5, Discover a Watershed: The Colorado (Project Wet Series), Mike Wilde

Explore the newest Project WET curriculum guide, "Discover a Watershed...The Colorado." This activity-driven, hands-on, interdisciplinary workshop will introduce you to water, watersheds, and the Desert Southwest using the Colorado River as a connecting theme. Participants will receive the "Discover a Watershed" guide and will walk away from the workshop with activities that are immediately usable and adaptable to a multitude of educational settings. If you want to learn more about the waterworks of Colorado...this is a workshop for you!

July 8-10, 2008, 9-5, Trees and Wildflowers of the Central Rockies, Doug Coleman The course will be designed for beginner and intermediate students of trees, shrubs, wildflowers, ferns and grasses on and within 40 miles of The Florissant Fossil Beds National Monument. After an introductory lecture, three days in the field are planned as we look at several regional ecosystems. Every attempt will be made to recognize and accommodate the learning levels of teachers, college students, and enthusiastic beginning botanists.

Seminar Descriptions 2008 (continued)

Most of the field trips will be done in stunningly beautiful montane plant communities with one trip planned to sub alpine or alpine communities, and perhaps one to the pinon/juniper foothills, if time allows. It is likely that we may view and identify between two and three hundred species as we are introduced to a dozen different plant families during the time we spend together. Notebooks will be provided with some pre-prepared material on the ecosystems and plant families. Participants must be in reasonably good physical condition. This means capable of a minimum of one mile of moderate uphill walking at elevations of 8-9,000 ft.

July 12, 2008, 9 – 5, Teacher Workshop: How to Excavate for Fossils-Hands On Activities for Students, Dr. Bob Carnein and Jeff Wolin

This is a hands-on workshop that will give teachers background information on the geology and paleontology of the Florissant Fossil Beds. It focuses on the Monument's active paleontology and excavation programs. Teachers will learn why and how excavations are done and get a chance to look for fossils at a nearby private quarry. Finally, teachers will learn about activities that they can do with their classes when they bring them on a field trip to the Monument. Graduate credit and BOCES credit provided for free- this seminar only.

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.

July 24, 2008, 9 – 5, Railroading on the Backside of Pikes Peak, Mel McFarland

Railroading on the Back Side of Pike's Peak; The seminar will start off with the background on the Colorado Midland Railway, built in 1887 and operated until 1920. Cripple Creek District Railways that operated from 1894 until 1949 will be discussed including looks at all the District Lines. The epic "Wildflower Excursions" on the Colorado Midland were very popular. A look at these will feature the Florissant to Lake George area. In the afternoon, a look at Pike's Peak's unique railway followed by on site looks at remaining portions of the Colorado Midland through Florissant to Lake George's Eleven Mile Canyon.

August 9, 2008, 9 – 5, Evolution and the Nature of Science: Pheromones, fossils, and a fishpod, Dr. Louise Mead

Come join us for a day-long workshop on evolution, given by Louise S. Mead from the National Center for Science Education. The scientific evidence for evolution is overwhelming. Educating students about evolution continues to be a controversial topic in many communities. Evolution and the nature of science: Pheromones, fossils, and a fishapod will include discussions of the nature of science and scientific theories, fossil evidence for evolution, and current research in evolutionary biology. Handson activities developed from recent fossil findings and strategies for teaching evolution in a climate of controversy will also be presented.

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Please fill out carefully, legibly, and completely in ink

Date: Social Security Number	//Birthdate	_/ / E-Mail Address:	
Sex: M F Home Phone:	Work Phone:		Are you a U.S. citizen? Yes No
Full Name: (Last)	(First)	Prev (Middle)	Previous Name:
Mailing Address:(Street -	(Street - P.O. Box)	(City)	(State) (ZIP) + 4
Have you previously enrolled at Adams State College?	°Z	Have you lived in Colorado continuously for the past 12 months?	Yes (CO resident) No (Non-resident)
If yes, term and year last enrolled:			
I would prefer to access my grade for this course online rather than by mail:	ne rather than by mail: Yes No	Ethnicity: (Mark any that apply)	
You must have at least a BA/BS to register for a course numbered 500 or above.	course numbered 500 or above.	American Indian or Alaskan Native	Asian or Pacific Islander
I have the following:	Doctorate Doctorate	Black, not of Hispanic origin Hispanic	Caucasian/vnite, not of nispanic Origin I do not wish to provide this information
I am taking this course for:	Undergraduate credit (approval required)		
Off-Campus Course for which you are registering:	:6	The following Selective Service question must be answered to comply with Colorado State Law:	on must be answered to comply
Prefix and Number:	CRN:	If you are a male born after December 31, 1050, are you registered with	24 4050 are you registered with
Title of Class:		the Selective Service?	or, 1909, are you registered with No
Instructor:	Credit Hours:		
Location of Class:	ASC Tuition:		
I understand that if an Incomplete grade is awarded, the incomplete grade will change to an "F" grade exactly one year from the registration date unless an earlier date is specified by my instructor. I understand that if I have registered for hours in excess of 20 within this term, I must acquire Extended Studies approval prior to registration for this course. I understand that I must fulfill the residence requirement in effect for any special degree or certificate. I understand that if this class is to be used in a degree program, approval must be secured from the student's assigned academic advisor. I hereby request admission to Adams State College as an Extended Studies (non-certificate or non-degree bound) student. I understand that if I wish official admission to a degree program, I must submit a regular application. I certify that all information (including Selective Service) I have provided is true.	incomplete grade will change to an "F" in earlier date is specified by my instructor.** within this term, I must acquire Extended set for any special degree or certificate. n, approval must be secured from the student's ended Studies (non-certificate or non-degree o a degree program, I must submit a regular ervice) I have provided is true.		
Signature	Date		



Friends of the Florissant Fossil Beds, Inc.

Join the Friends of the Florissant Fossil Beds, Inc. and help support Florissant Fossil Beds National Monument. Receive an immediate discount on your seminar fees!

Friends Membership Form	
Membership Categories	
Individual \$15.00	Name
Individual (2 year) \$27.00	Street
Family \$25.00	City
Family (2 year) \$40.00	State
Corp/ Business \$100.00	ZIP
Lifetime (Old Fossil) \$300.00	Phone
Contribution	
Total	

Seminar Registration Form

Teacher graduate credits are \$22.50 for 1/2 credit (7.5 hours) and \$45.00 for 1 full credit (15.00 hours)								
Course	Seminar Title	Seminar	Adams State Tuition	BOCES	Total amount			
Number		Fee	\$22.50/ \$45.00/ \$67.50	\$5.00	this seminar			
ED 589								
ED 589								
ED 589								
ED 589								
ED 589								
ED 589								
			Membership Dues					
			Subtotal					
			Total					

Mail completed forms with payment to: Friends of the Florissant Fossil Beds PO Box 185 Florissant, CO 80816