

# Florissant Fossil Beds Field Seminars 2018

It is the goal of the Friends of the Florissant Fossil Beds, Inc. and the staff at Florissant Fossil Beds National Monument to provide high quality, educational programs for the general public and educators. These programs endeavor to further the public's understanding of the geology, history, paleontology, and ecology of the Monument and the Pike's Peak Region.

Pre-registration is required for all seminars.

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## Friends of the Florissant Fossil Beds, Inc.

The Friends of the Florissant Fossil Beds are dedicated to assisting the National Park System in preserving, protecting and advancing knowledge about the natural and cultural resources of the Florissant Fossil Beds National Monument. As a 501(3)(c) nonprofit organization, the Friends mission is to raise funds and promote programs and activities to advance the Monument's educational, interpretive and scientific objectives. 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.

The opinions and views represented in the seminar series are not necessarily that of the National Park Service or the Friends of the Florissant Fossil Beds, Inc.

# Seminar Descriptions 2018

Astronomy and the Dark Skies of Florissant Fossil Beds, Saturday, June 9, 3:00 PM - 10:30 PM

This seminar will begin with a classroom session that provides a basic introduction to the field of astronomy. Presentation time will be mixed with hands on activities. Many of these activities will be helpful for teachers and/or leaders who are interested in presenting astronomy to groups. The last part of the seminar will be a night sky program. Participants will be able to make observations through telescopes that are provided by the Colorado Springs Astronomical Society. This portion of the program is part of a monthly program that is open to the public.

Wildlife Management in the Pikes Peak Region, Tuesday, June 19, 2018, 9:00 AM - 4:30 PM

This seminar explores the importance of wildlife management in the Pikes Peak region. The seminar will start with a classroom session on the reasons for managing certain species of animals in Colorado. Mammals will be the main focus of the initial discussion and powerpoint. The second part of the seminar will be a field trip to various areas in the Pikes Peak region to see the effects of wildlife management. This program starts at Florissant Fossils Beds but travels offsite for a field trip. For insurance purposes (because of offsite travel), all participants must become a member of the Friends of Florissant Fossil Beds. See page 6 for information on how to join the Friends and sign up for the seminar.

Geology Camp for Adults, Thursday, June 28, 9:00 AM - 4:30 PM

This seminar provides an introduction to basic geology concepts and to the geology of the Florissant Fossil Beds NM. This seminar provides hands-on activities for how to teach these concepts to upper elementary students. This seminar is ideal for anyone who is interested in learning the basics of geology and finding ways to share this information with others. Some of the concepts covered will be: the structure of Earth and plate tectonics. Most of the seminar will be outside. We will hike the new Geologic Trail in the Monument and the Petrified Forest Loop. Participants must be able to hike at least 2 miles. A short trip to a private quarry will allow participants to look for fossils.

The Impact of Insects In Our Natural and Human World, Monday, July 9, 9:00 AM - 4:30 PM

Insects are the foundation of food webs, responsible for the pollination of most plants, and play roles in seed dispersal, and decomposition of decaying organic matter, to name but a few of their "ecological services." Participants in this workshop will discover examples of these relationships with other organisms, learn the principals of insect identification, and take home an array of resources for themselves and their students. The information presented can be applied to personal decisions in pest management, in the classroom, in school landscaping and gardening, out in the field, and beyond. Classroom audiovisual presentations will be complemented by field outings.

Natural History and Ecology of Flammulated Owls , Thursday, July 12, 2018, 5PM - 12:30 AM, Dr. Brian D. Linkhart

Flammulated Owls, tiny raptors that hide in the shadows of ponderosa pines by day and fly as silently as a breeze on starlit summer evenings, were little known for more than a century. But the results of more than 30 years of study have shed light on the ecology and habitat of the sensitive owl, with the aim of assisting in the development of conservation plans for forest ecosystems containing this and other sensitive animals. Participants in the field-based course will learn about the natural history and ecology of the owl, and will participate in a nocturnal adventure into territories of owls in an attempt to hear whispers of its territorial song, observe its nesting behaviors, and possibly attempt captures of adult owls. Participants should be prepared to take short to moderate hikes over steep, forested terrain, in a landscape illuminated only by soft starlight (and your headlamp), and may have the opportunity to experience close encounters with several forest creatures, including owls. Previous knowledge of ecology and bird identification is helpful but not mandatory. This course is especially suitable for science teachers or those with an interest in ornithology, ecology, or field biology. This program is at the Manitou Experimental Forest in Woodland Park, Colorado. For insurance purposes (because of offsite travel), all participants must become a member of the Friends of Florissant Fossil Beds. See page 6 for information on how to join the Friends and sign up for the seminar.

None of the above seminars require pre-requisite science courses or knowledge.

# Instructor Biographies 2018

## Bruce Bookout

Bruce Bookout is a professional astronomer and a professor at Pikes Peak Community College. He is an active member of the Colorado Springs Astronomical Society. He is a co-host for the NPR radio show "Looking Up." He organizes and leads night sky programs throughout the state for diverse audiences.

## Eric Eaton

Eric Eaton is a writer trapped in an entomologist's body. He is principal author of the Kaufman Field Guide to Insects of North America, contributor to additional books, and has published articles in *Birds & Blooms*, *Ranger Rick*, *Missouri Conservationist*, *Orion*, and several other popular periodicals. He has worked as an entomologist for the Cincinnati Zoo, Chase Studio, Inc., and University of Massachusetts (Amherst); and on private contract for the Smithsonian, and West Virginia Department of Natural Resources. He grew up in Portland, Oregon and has lived in Cincinnati, Ohio and Tucson, Arizona before moving to Colorado Springs where he resides with his wife, Heidi.

## Ricardo Escobar, MS

Ricardo Escobar is an Education Specialist at Petrified Forest National Park. Ricardo was a "Geoscientist in the Park" intern at the Florissant Fossil Beds NM in 2017. He is a graduate of the MOSAICS in Science Diversity Internship Program. During his internship with MOSAICS, he designed a geology/paleontology camp for upper elementary school students which is being held this summer at Florissant Fossil Beds NM. Ricardo earned a B.S. in Geology from CalState at LA. He received his M.S. in Geology from Western Washington University. He also worked in an elementary after school program in Los Angeles where he worked with diverse audiences.

## Brian D. Linkhart, PhD

Dr. Brian D. Linkhart is Associate Professor of Biology at Colorado College, where he teaches several field courses in ornithology, ecology, and field biology. He was a seasonal research biologist for the U.S. Forest Service for 18 years, and has taught summer field seminars on forest ecology since 1986. Over the past 35 years, Brian has conducted research on the ecology of several sensitive, threatened, and endangered birds in grassland and forest ecosystems. Since 1981, he has been supervising research crews studying the demography and habitat of Flammulated Owls on the Manitou Experimental Forest in central Colorado. This study, one of the longest running investigations of population ecology of birds in the U.S., is providing insight into how Flammulated Owls may be affected by environmental changes due to factors such as habitat alteration and climate change.

# Instructor Biographies 2018

Tonya Sharp

Tonya Sharp was a District Wildlife Manager for Colorado Division of Wildlife/Parks and Wildlife for 23 years. Her entire career was spent in the Pikes Peak area. She has a B.S. in Wildlife Biology from the University of Wyoming. Since retiring in 2014, she has been active volunteering for Catamount Institute and specifically the E3 (Elevate Environmental Education) program in Woodland Park. Sharp also worked for USFS and taught high school math and science.

# Registration Information

## Pre-Registration is Required for All Seminars

The following list will guide you through the registration process:

1. The first step is to decide which course(s) you want to take, noting the fees for each seminar. See course descriptions for more information about each seminar.

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.

3. Are you a teacher? Will you be taking this course for graduate and/or undergraduate credit through Adams State University and/or recertification credit through BOCES?

4. Once you have decided which course(s) you would like to take, what credits, if any, you would like to receive, and whether or not you want to join the Friends group, you are ready to register by one of the following methods:

a. (Mail In/ Call In) Fill out the registration form at the end of the brochure and mail it with your payment. You can pre-register by calling (719) 748-3253, ask for extension 109 and leave a message. Your phone reservation will be held for 10 days. Receipt of payment confirms your space in the seminar).

b. (On Line) Register on-line by going to [www.fossilbeds.org](http://www.fossilbeds.org) and selecting 'Seminars' from the main menu, following the registration and payment instructions there (through PayPal).

Please remember that for each seminar you want to take for graduate credit from Adams State University, you must fill out a separate graduate credit registration form that is at the end of this 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 University tuition or BOCES recertification fee must be included with seminar registration and fees.

# Fees and Tuition

## Friends' Seminar Fees

\$25.00 fee for each 1 day seminar

\$15.00 discounted fee for current member of Friends, 1 day

## Adams State University Graduate Credit Tuition and Adams State University Undergraduate Credit Tuition

\$27.50 tuition for 1/2 credit per 1 day, 7.5 hour class

Please note that you must attend the entire 7.5 hour day to get credit.

## BOCES Recertification Tuition

\$15.00 recertification credit through the Pike's Peak BOCES of Colorado Springs

Call For Details (719) 748-3253 ext. 109

Please note that you must attend the entire 7.5 hour day to get credit.

## 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 ASU 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.

# 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 to the entrance of Florissant Fossil Beds. Proceed to the visitor center area. The seminars will be held in the Yurt (30 foot circular tent) at the south end of the picnic area unless otherwise stated.
- All seminars begin at the Yurt at 9 am and end at 5 pm UNLESS OTHERWISE NOTED. PLEASE READ ALL INFORMATION CAREFULLY in the seminar description. 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 1-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.

You will be called before the seminar to insure you are prepared for the seminar with directions, proper clothing, lunch, and to address any concerns or physical limitations. You will also be notified if carpooling is a part of the seminar you will be attending.



## 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

Student	\$10.00
Individual (1 year)	\$20.00
Individual (2 year)	\$36.00
Family (1 year)	\$30.00
Family (2 year)	\$50.00
Paleovespa	\$500.00
Brontothere	\$1,000.00
Sequoia affinis	\$5,000.00

Name\_\_\_\_\_

Street\_\_\_\_\_

City\_\_\_\_\_

State\_\_\_\_\_

ZIP\_\_\_\_\_

Email\_\_\_\_\_

Phone\_\_\_\_\_

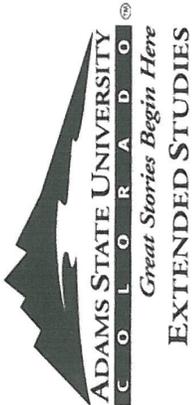
Contribution\_\_\_\_\_

Total \_\_\_\_\_

# Seminar Registration Form

Teacher graduate credits are \$27.50 for 1/2 credit (7.5 hours)					
Course Number	Seminar Title	Seminar Fee	Adams State Tuition \$27.50	BOCES \$15.00	Total amount 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



**ADAMS STATE UNIVERSITY**  
**208 Edgemont Blvd., Suite 3000 Alamosa, CO 81101**  
**EXTENDED STUDIES REGISTRATION FORM**  
**Toll Free: 1-800-548-6679 or (719) 587-7671 FAX: (719) 587-7974**  
**Website: <http://exstudies.adams.edu>**

Date \_\_\_\_\_ Social Security Number \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Birthdate \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ E-Mail Address \_\_\_\_\_

Full Name: \_\_\_\_\_  
 (Last) \_\_\_\_\_ (First) \_\_\_\_\_ (Middle) \_\_\_\_\_ Previous Name \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
 (Street - P.O. Box) \_\_\_\_\_ (City) \_\_\_\_\_ (State) \_\_\_\_\_ (ZIP) + 4 \_\_\_\_\_ New Address?: Yes \_\_\_\_\_ No \_\_\_\_\_

Sex:  M  F Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_ School District: \_\_\_\_\_

Have you previously enrolled at Adams State University?  Yes  No  No (Non-Resident)

Are you a Colorado Resident?  Yes  No (Non-Resident)

I have lived in Colorado since: \_\_\_\_\_

The following Selective Service question must be answered to comply with Colorado State Law: If you are a male born after December 31, 1957, are you registered with the Selected Service?  Yes  No

Course Prefix & Number: \_\_\_\_\_  
 Course Title: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Credit Hours/CEUs: \_\_\_\_\_  
 Instructor of record: \_\_\_\_\_

**\*\*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 University 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.

Ethnicity: (Mark any that apply. Not required.)

American Indian or Alaskan Native

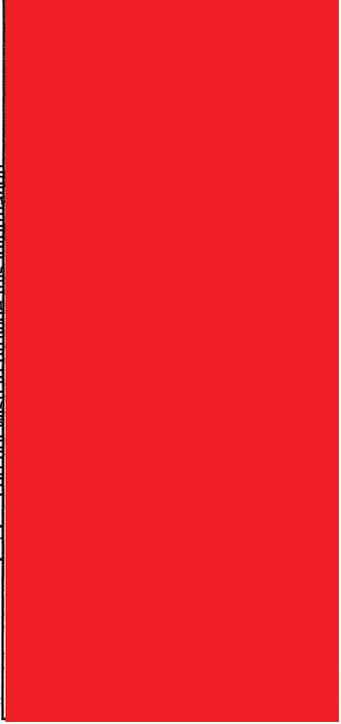
Black, not of Hispanic origin

Hispanic

Asian or Pacific Islander

Caucasian/White, not of Hispanic Origin

I do not wish to provide this information



An Official Transcript will be sent to your mailing address at no additional cost when a final grade for this course(s) has been posted. To request additional transcripts, please visit <http://www.getmytranscript.com>.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_