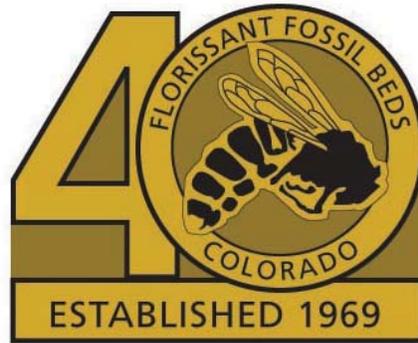


Florissant Fossil Beds Field Seminars 2009



40th Anniversary "A Celebration of Preservation"

This summer on August 22-23, we will celebrate the establishment of the Monument with a weekend of wonderful activities. The events start with a full day seminar on Saturday that highlights the history of the establishment of the Monument. Forty years ago, in August of 1969, three valiant women, members of a group called the Defenders of Florissant, led a fight to preserve one of the richest fossil deposits in the world – the fossil beds of the Florissant valley. At that time, the fossil beds were in danger of being damaged and lost due to development. Estella Leopold, Betty Willard and Vim Wright along with other citizens, scientists, and talented lawyers proved that a group of dedicated people can truly make a difference in the world. Because of the legal, political, and educational efforts that took place, millions of people have been able to learn about and enjoy the fossils which are now a part of the National Park System. It is time to honor the achievements of those who had the forethought to fight for the preservation of a national treasure.

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	3
How to register	5
Things you should know	5
Seminar descriptions	6-8
Instructor Biographies	9-10
Adam's State graduate credit form	11
Seminar registration form and Friends membership form	12

Fees and Tuition

Friends' Seminar Fees

\$50.00 fee for each 1 day seminar

\$65.00 fee for the 2 day seminar (can be taken for 1 or 2 days with associated credit)

\$40.00 discounted fee for current member of Friends, 1 day

\$55.00 discounted fee for current member of Friends, 2 day

Adams State College Graduate Credit Tuition

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

\$55.00 tuition for 1 full credit per 2 day, 15.0 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.

NOTE: Seminars on August 22nd and 23rd have no fee except for people seeking Adam's State or BOCES 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 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:

1. 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/forteachers/seminar-series.htm>.

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 11 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 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.

Seminar Descriptions 2009

Saturday, May 30, 2008, 9 – 5, Dr. Herb Meyer, Geology and Paleontology of the Florissant Valley

The 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. Field trips will examine 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.

Thursday, June 18, 2009, 9 - 5, John Stansfield, They're Alive! Bringing Historical Characters Back to Life with First-person Storytelling

Imagine sharing the remarkable experiences of people from the past-- Meriwether Lewis, Margaret (Molly) Brown, Rosa Parks, John Muir, or many others—with interested audiences today. Recreating historical characters in the first person is a powerful tool for teachers, docents, interpreters, storytellers, students age nine and up, and just plain history buffs. In this seminar, participants experience brief views into past lives reenacted by the workshop presenter. They learn basic skills of biographical research and scripting. They develop their natural first-person storytelling talents through simple, engaging, non-threatening exercises.

Saturday, June 20, 2009, 9 - 5, Kevin Cook, Insects in the Colorado Landscape

From grasshoppers affecting pioneer agriculture through mosquitos spreading West Nile Fever to mountain pine beetles altering entire mountain forests, insects insinuate themselves into health, agriculture, economics, and ultimately politics. And for naturalists, insects are just fascinating all on their own. This seminar, intended as an introduction for naturalists and not as a foundation course for future entomologists, will examine details that determine classification of insects and thereby establish the basis for identification. Protocols for insect finding and identification will be presented, and current issues regarding conflicts between people and insects will be discussed. The current mountain pine-beetle phenomenon will serve as a discussion model.

Saturday, June 27, 2009, 9 - 5, Steven Veatch, Red Rocks and Cool Caves: A Geological Adventure

This field experience, designed for everyone, will explore the geology of the Cave of the Winds and the Garden of the Gods. Entering an amazing world underground, we will start with looking at the geology of caves as well as the origins and types of speleothems (cave formations). The Cave of the winds holds many secrets for explorers: oddly shaped rocks, hidden waterfalls, tiny plants and bizarre animals.

At the Garden of the Gods Visitor Center we will watch the movie “How Did Those Red Rocks Get There?” Lunch will be provided at the “Café at the Garden.” After lunch on the deck, we will explore the magnificent rocks of the Garden of the Gods. Our study of the park’s geologic history includes

Seminar Descriptions 2009 (continued)

Colorado's "disappearing" mountain range (the Ancestral Rocky Mountains), evidence of ancient oceans and deserts, dinosaur bones, and the uplift of the modern day Rocky Mountains. There will be additional fees for this seminar.

Thursday, July 9, 2009, 9 - 5, Larry Stebbins, Sustainability

What is sustainability? By the end of this class, you will have a good idea. You will know and be able to teach others how to calculate their "carbon footprint", compare and contrast societies that have failed and others that have succeeded, interpret population growth information, compare and contrast hydrocarbon, nuclear and sustainable energy systems, compare and contrast local vs. non-local food systems, and be able to demonstrate how to properly amend soil for planting, compost, select varieties of vegetable plants that will grow well in this area, and demonstrate correct maintenance and harvesting tips of five common vegetables. This seminar will take place at the Woodland Park Harvest Center.

Friday, July 10, 2009, 5pm - 2am, Natural History and Ecology of the Flammulated Owl, Brian Linkhart

The Flammulated Owl, as small as a fist and reticent enough to disappear in the shadows of western forests, was little known for more than a century. But the results of more than 25 years of study have shed light on the ecology and habitat requirements of the sensitive owl, with the aim of assisting in the development of conservation plans for forest ecosystems containing this and other sensitive species. Participants in this field-based course will learn about the natural history and ecology of the owl, and will participate in a nocturnal adventure into occupied territories of the owl in an attempt to hear whispers of its territorial song, observe its nesting behaviors, and attempt possible 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 handlamp), and may have the opportunity to experience close encounters with several forest animals, 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.

Tuesday, July 14, 2009, 9 - 5, Doug Coleman, Forest Ecosystems of the Central Rockies

An introduction to the Flora of the Florissant Fossil Beds. The class will explore the Montane ecosystems and plant families of the Monument through lecture and field experiences. The class is designed to help individuals from that region

Saturday, Sunday, July 18-19, , 2009, 9 - 5, Gold Belt Tour, Herbert Meyer PhD, Woody Henry PhD.

The Gold Belt National Scenic Byway extends from Florissant at its northern end to Cañon City on the south. The area encompasses world famous fossil sites, the remnants of extinct volcanoes, a gold mining district, crystalline basement rocks, layered sedimentary rocks, uplifted mountains and ridges, and deeply eroded canyons. This field-oriented course will examine 1.7 billion years of Earth history in this region, including the Eocene plants and insects at Florissant fossil beds, volcanic rocks from the Thirtynine Mile Volcanic Field, ore mineralization and mining in the Cripple Creek volcanic complex, incision of the Royal Gorge, sedimentary rock formations of the Cañon City embayment, and the paleontology of the Jurassic dinosaurs of Garden Park. Basic concepts of geology pertaining to this region will be discussed, including the formation of rock types, volcanic processes, sedimentation and stratigraphy, tectonics, types of fossilization, major groups of fossil organisms

from these sites, and the use of these fossils in reconstructing paleoclimates. This is a 2-day seminar, and participants are required to register for both days. Each day's schedule will be 8:00 a.m. to 5:30 p.m., the first day beginning and ending in Florissant, and the second day in Cañon City. The course is most suitable for science teachers or people with an interest in geology. A previous background in principles of geology is strongly recommended. The instructors for this course are coauthors of the guidebook *Geology of the Gold Belt Byway, Colorado*. Students are encouraged to purchase this guidebook for the field trip at a cost of \$20, which will be available during registration. Participants need to pay on-site entry fees of \$5-10 in addition to their registration.

THIS SEMINAR IS FREE!!! Fees for Adam's State or BOCES credit apply.

Saturday, August 22, 2009, 8:00 AM - 4:30 PM, Herb Meyer PhD., Estella B. Leopold PhD, *Preserved in Time: The Landmark Environmental Achievement to Save the Florissant Fossil Beds*

Florissant Fossil Beds National Monument was created from private lands on August 20, 1969 following a storm of legal, political, and grassroots controversy. This seminar will be held on the event of the Monument's 40th Anniversary in conjunction with many of the speakers and events scheduled for the celebration that afternoon, including firsthand accounts from some of the prominent people who were directly involved. The morning session will be open only to those enrolled in this seminar, and will feature the authors (Leopold, Meyer, and Stansfield) of a new book currently in preparation about the Monument's establishment, *Preserved in Time: The Fight to Save the Florissant Fossil Beds*. The day's topics will include the importance of preserving the fossil beds, the value of grassroots environmental activism, and the impact of Florissant's establishment on setting new precedents in environmental law. Seminar participants will have the opportunity during the morning session to interact with Dr. Estella Leopold, daughter of renowned conservationist Aldo Leopold, and hear about the actions that she, two other women, and The Defenders of Florissant brought forth to save the Florissant fossil beds.

Note: This seminar will begin at 8:00 a.m.

THIS SEMINAR IS FREE!!! Fees for Adam's State or BOCES credit apply.

Sunday, August 23, 2009. Herbert Meyer PhD, Beth Simmons PhD, Steven Veatch. *The History of Paleontology and Fossil Tourism in the Florissant Valley*.

Following the first government survey of the Rocky Mountain region during the 1870s, Florissant soon became widely recognized as one of the most significant fossil sites in the American West. The first fossil discoveries at Florissant came at an important time in the development of the science of paleontology. This seminar will examine the contributions of the major scientific figures to Florissant paleontology during the nineteenth and twentieth centuries, including Leo Lesquereux, Samuel Scudder, T.D.A. Cockerell, and Harry MacGinitie. We will also highlight the homesteaders and settlers who made prized discoveries for the scientists, and the later landowners and entrepreneurs who popularized Florissant as a destination for fossil-seeking tourists. Combining lecture discussions with field trips to historic fossil sites and commercial attractions, this seminar will provide a broad overview about Florissant's place in the world of paleontology, before it was established as a national monument in 1969.

Instructor Biographies 2009

Kevin Cook. Coming to Colorado in 1974, Kevin earned a B.A. in biology at Western State College and an M.S. in wildlife biology at Colorado State University. After five years as a seasonal interpretive naturalist with the National Park Service interspersed with stints with the BLM and Colorado Division of Wildlife, he settled into a career as a self-employed writer-naturalist. Since 1975, he has guided 200 birding and wildlife-observation tours; taught almost 400 classes regarding wildlife identification, outdoor skills, and nature writing; and published nearly 7,000 newspaper, magazine, book, and website essays about wildlife, including one of the essays for Houghton Mifflin's 2007 book, *Good Birders Don't Wear White: 50 Tips from America's Top Birders*.

Woody Henry is a paleontologist who is interested in fossil invertebrates, sedimentary basin analysis, coal resources, and geologic mapping. He received a Ph.D. from the School of Geology and Geophysics at the University of Oklahoma. He retired from a long career with the U.S. Geological Survey and teaching geology at Front Range Community College in Colorado, and he currently lives in Montana. He is the author of many scientific papers and is the leading author of *Guidebook to the Goldbelt Byway*.

Estella Leopold is a botanist whose field is the study of Cenozoic environments using pollen analysis. She completed her PhD at Yale. She was employed with the U.S. Geological Survey to study the evolution of North American forests and climate history based on fossil pollen. She is currently Professor Emeritus at the University of Washington. A long-time conservationist, Estella was one of the primary leaders in helping to establish the Florissant Fossil Beds National Monument and in averting the damming of Grand Canyon National Park. She is a member of the National Academy of Science and the American Philosophical Society. She has published more than 100 papers in peer-reviewed journals. She is co-founder and past President of the Aldo Leopold Foundation.

Herb Meyer is the paleontologist for Florissant Fossil Beds National Monument, where he has been since 1994. He is also an Adjunct Faculty member at the University of Colorado at Boulder, and a Research Associate for the Denver Museum of Nature & Science. He received his Ph.D. in Paleontology from the University of California at Berkeley. His interests are in Tertiary paleobotany, including studies of fossil plants to infer past climates and elevations. He has written many scientific articles about Florissant and other fossil sites, and his books include *The Fossils of Florissant*, *Geologic Guidebook to the Goldbelt Byway*, and *Paleontology of the Upper Eocene Florissant Formation*. He is currently working with Estella Leopold on another book, *Preserved in Time: The Fight to Save the Florissant Fossil Beds*.

Beth Simmons received her B.A. in geology from Allegheny College, an M.A. in geology from Bowling Green State University, and a Ph.D. in Colorado History from the Union Institute and University. She worked for three summers as museum assistant at Florissant Fossil Beds National Monument. She currently teaches geology and Colorado history at many colleges in the Denver area, and has authored many historical articles and books including *The Legacy of Arthur Lakes*, a biographical account of Colorado's pioneering geologist who collected at Florissant in 1877 with Samuel Scudder. Simmons serves on the board of directors for the Friends of Dinosaur Ridge and is active in the Western Interior Paleontological Society.

Dr. Brian D. Linkhart is an Associate Professor of Biology at Colorado College, where he teaches several field courses including 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 25 years, Brian has conducted research on the ecology of various sensitive, threatened, and endangered birds in grassland and forest ecosystems. Since 1981, he has been supervising a research crew studying the demography and habitat requirements of Flammulated Owls on the Manitou Experimental Forest in central Colorado. This study, now one of the longest running investigations of avian population ecology in North America, is providing insight into how the small forest raptor may be affected by environmental changes, such as alteration of forest habitats, and climatic trends.

John Stansfield. Storyteller and author John Stansfield began exploring western North America as a boy in 1960 and has never stopped. He loves hiking and skiing the West and telling stories about its diverse lands, wildlife, and people. Stansfield presents programs reenacting the lives of Enos Mills and Charles Fox Gardiner, pioneer physician. He recently authored biographies, *Enos Mills: Rocky Mountain Naturalist* and *John Denver: Man for the World* (Filter Press 2005, 2008 respectively). His book *Writers of the American West: Multicultural Learning Encounters* (Teacher Ideas Press, 2002) earned a Colorado Authors' League Award and was a finalist for the Colorado Book Award. He teaches storytelling on the adjunct faculty of the University of Colorado--Colorado Springs and is the founder of the Rocky Mountain Storytelling Festival. John spends his spare time working to protect Colorado's wild places. For these efforts, the Wilderness Society presented him an Environmental Heroes Award in 2004.

Larry Stebbins is a former chemistry teacher, assistant principal middle school, assistant principal high school, principal elementary school. Retired from public education after 35 years. Botanist and lifelong organic gardener. Presently, director of Pikes Peak Urban Gardens (PPUG), a non profit that helps build community gardens and urban farms in the Pikes Peak region.

Steven Veatch. Throughout his career as a geologist, Steven Veatch's research has focused on Colorado geology and mining history. He has conducted educational earth science programs throughout the Pikes Peak region. With colleagues and students from across the nation, he has studied a diversity of earth science topics, including climate change, glaciation, and Colorado's fossil record. Steve is an adjunct professor of earth science at Emporia State University where he received an MS in earth science. He has written over 100 articles and professional papers on geology. Steve is from a pioneering Teller and Boulder County mining family.



ADAMS STATE COLLEGE
 208 Edgemont Boulevard, Alamosa, Colorado 81102
EXTENDED STUDIES REGISTRATION FORM

Toll-Free: 800.548.6679 Phone: 719.587.7671 Fax: 719.587.7974

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) _____ (Middle) _____ Previous Name: _____

Mailing Address: _____ (Street - P.O. Box) _____ (City) _____ (State) _____ (ZIP) + 4

Have you previously enrolled at Adams State College? Yes No 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: Yes No

You must have at least a BA/BS to register for a course numbered 500 or above.

I have the following: No Degree BA/BS MA Doctorate

I am taking this course for: Graduate credit Undergraduate credit (approval required)

Ethnicity: (Mark any that apply)

American Indian or Alaskan Native Asian or Pacific Islander
 Black, not of Hispanic origin Caucasian/White, not of Hispanic Origin
 Hispanic I do not wish to provide this information

Off-Campus Course for which you are registering:

The following **Selective Service** question must be answered to comply with Colorado State Law:

Prefix and Number: _____ CRN: _____

Title of Class: _____

Instructor: _____ Credit Hours: _____

Location of Class: _____ ASC Tuition: _____

If you are a male born after December 31, 1959, are you registered with the Selective Service? Yes No

****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.

 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 Number	Seminar Title	Seminar Fee	Adams State Tuition \$22.50/ \$45.00/ \$67.50	BOCES \$5.00	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