

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: College Paleontology Curriculum for Florissant Fossil Beds NM

Discipline: Natural
Type of Project: Education
Funding Agency: National Park Service
Other Partners/Cooperators: University of Colorado at Denver
Effective Dates: 3/1/2009-3/1/2010
Funding Amount: \$4,935

Investigators and Agency Representative:

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Project Abstract: In 2007, a draft version of an online college curriculum was developed for Florissant Fossil Beds by University of Colorado at Colorado Springs through a Parks as Classrooms Grant. Unfortunately, the format that was used to design the program became unusable with the National Park Service's Content Management System (web software). In addition, when the Monument began the editing process it found information that was outdated or incorrect and also the interactivity and usability of the product seemed weak. Florissant Fossil Beds discovered a RM-CESU partner that specializes in developing online curriculum. The Monument would like to use their expertise to complete the online curriculum in a format that can be used and update the information and activities.

BACKGROUND

A beautiful mountain valley just west of Pikes Peak holds spectacular remnants of the earth's prehistoric life. Huge petrified redwoods and incredibly detailed fossils of ancient insects and plants reveal a very different Colorado of long ago. Almost 35 million years ago, enormous volcanic eruptions buried the then-lush valley and petrified the redwood trees that grew there. A lake formed in the valley and the fine-grained sediments at its bottom became the final resting-place for thousands of insects and plants. These sediments compacted into layers of shale and preserved the delicate details of these organisms as fossils. The Florissant Fossil Beds are world-renowned, and in 1969 were set aside as a part of our National Park System as Florissant Fossil Beds National Monument. Scientists have been studying the fossils in the Florissant valley since the late 1800's. During that time, thousands of fossils have been discovered and reside in museums all over the world. In the 1990's, the park paleontologist Dr. Herb Meyer, conducted research to locate and photograph the collections of these fossils. The data from this project was used to create a paleontology database that researchers can access online to search Florissant's fossils. A companion, educational component (college paleontology course) was created in 2005 but never made it onto the web as intended due to technical problems.

AUDIENCE

This curriculum is intended to be used by advanced high school or introductory college courses. Ideally, it would be used before students come on a field trip as an introduction, but could be used at any time.

OBJECTIVES

Students that complete the curriculum would be able to:

- 1) Explain the significance of the fossils at Florissant and why it is a national park
- 2) Describe how fossil leaves are identified
- 3) Identify fossil leaves based on a key provided.
- 4) Explain how fossil leaves can provide scientists information on paleoclimate

5) Do basic searches on the Paleontology Database

EVALUATION

The curriculum will be tested by audiences during its creation and also while it is in use so that it can be improved. Audiences will be selected and will evaluate the product using evaluation forms designed by Florissant Fossil Beds National Monument in accordance with NPS policies.

SCOPE OF WORK

The Cooperator (University of Colorado at Denver) shall provide the National Park Service with all labor, materials, and services to update and produce a College Paleontology curriculum.

Florissant Fossil Beds National Monument will be *substantially involved* in all phases of development. This will include the review and suggestions for each section, the content, and all activities of the paleontology course. Florissant will ensure that the course follows policy and protocol for features that will go on the NPS website.

Outcomes with Completion Dates: Due Date for Final Report and/or Project Deliverables: September 30, 2009

Keywords: Paleontology, Curriculum, Florissant Fossil Beds National Monument, University of Colorado at Denver