



Foundation Document Overview

Florissant Fossil Beds National Monument

Colorado



Contact Information

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Purpose



The purpose of FLORISSANT FOSSIL BEDS NATIONAL MONUMENT is to preserve and protect the insect and leaf fossils of the Florissant Formation and related paleontological, geological, and scenic resources, thus providing for scientific research and interpretation, leading to public understanding and stewardship of these significant resources.



Significance

Significance statements express why Florissant Fossil Beds National Monument resources and values are important enough to merit national park unit designation. Statements of significance describe why an area is important within a global, national, regional, and systemwide context. These statements are linked to the purpose of the park unit, and are supported by data, research, and consensus. Significance statements describe the distinctive nature of the park and inform management decisions, focusing efforts on preserving and protecting the most important resources and values of the park unit.

- Unusual geologic circumstances 34 million years ago resulted in the deposition of the Florissant Formation preserving one of the world's most species-rich assemblages of fossil plants and insects, including more than 1,700 described species.
- The fossils of the Florissant Formation provide important evidence to interpret global climate changes and consequent biotic responses during the Eocene-Oligocene transition, providing insight into the ongoing processes of evolution, extinction, biogeography, and climate changes.
- The petrified redwood tree stumps of the Florissant Formation, which are some of the largest fossilized tree stumps in the world, are impressive examples of an ancient forest preserved by a volcanic debris flow and include the world's only known fossilized stump trio.
- Today's scenic landscape, including the geological features, meadows, and forest, provide a rare opportunity for visualizing the ancient redwood forest and the footprint of the ancient lake environment critical to the deposition of the Florissant Formation.
- The Florissant Fossil Beds National Monument has been an outdoor research laboratory for paleontology since the early 1870s, resulting in more than 600 scientific publications and providing opportunities for exploration, discovery, and education by scientists, students, visitors, and the public. Ongoing excavations and new scientific techniques provide for new discoveries and the reevaluation of scientific concepts.

Fundamental Resources and Values

Fundamental resources and values are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to merit primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance.

- **Paleontological Resources**
- **Geological Resources**
- **Collaborative Conservation, Science, and Scholarship**
- **Museum Collections**
- **Opportunities to Connect to Resources**
- **Scenic Resources/Views**

Florissant Fossil Beds National Monument contains other resources and values that may not be fundamental to the purpose and significance of the park, but are important to consider in management and planning decisions. These are referred to as other important resources and values.

- **Continuum of Human Connection to the Land**
- **Natural Systems**



Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from—and should reflect—park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all of the park significances and fundamental resources and values.

- The Florissant Formation's world-class fossil resources, comprising one of the most complete records of a late Eocene biotic community, provide excellent opportunities to explore changes in Earth's systems over time using science as a way of understanding.
- The paradoxical aspects of fossilization in the Florissant Formation fuel our drive to explore Earth's mysteries and inspire us to marvel at the complexity and subtlety of the natural world.
- The successes of Adeline Hornbek, Charlotte Hill, Estella Leopold, and other women exemplifies the challenges faced by women in the Florissant valley through time and inspires us to recognize and overcome the challenges of our own time.
- The natural and cultural resources of Florissant Fossil Beds National Monument provide a contemplative environment in which to ponder the great questions of life.



Description

Florissant Fossil Beds National Monument is located in a mountain valley 35 miles west of Colorado Springs, Colorado, and was established in 1969. Within the 5,998 acres of montane forests and meadows lies one of the richest fossil deposits in the world. Because of the high diversity of its fossil flora and fauna, Florissant ranks as one of the world's best known and richest paleontological resources. The fossils and geology provide a detailed snapshot of the late Eocene epoch in the western interior of the United States 34.07 million years ago, just preceding a major global cooling event. Florissant's fossil plants reveal a warm-temperate, almost subtropical climate and provide evidence that during the late Eocene, Florissant was at a similar elevation as today—8,500 feet (2,590 meters). Ancient Lake Florissant formed near an active volcanic center, the Guffey volcano, which was the source of lahars and ashfalls that buried plants and animals alike, and preserved their remains in the process.

Among the hallmarks of the monument are massive petrified Redwood trees that include a rare example of clonal reproduction and some of the largest diameter petrified trees known to exist. In addition to the Redwoods, there were at least 150 species of conifers and hardwoods growing around the lake margin and at higher elevations. The community of this forest ecosystem included 1,500 species of insects and spiders, along with birds and mammals. The aquatic community of Lake Florissant provided the habitat for shorebirds, freshwater clams and snails, ostracods, insect larvae, aquatic plants, and fish. The remains of these organisms are sealed within layers of paper-thin, diatom-rich shales like beautifully illustrated pages of a book.

The paleontological and geological resources of the Florissant Formation, both *in situ* and in extensive museum collections throughout the world provide opportunities for new and continuing research and learning. The park also offers recreational, educational, and interpretive opportunities for discovery and exploration of one of the world's richest fossil deposits within a short drive from an urban environment.

