

# **florissant**

**fossil beds**



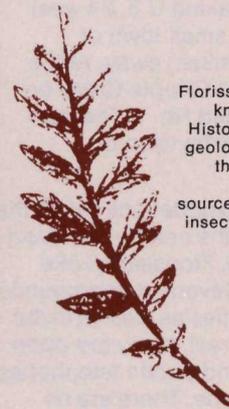
### An Ancient Calligraphy

Beneath these gently rolling meadowlands, a delicate fossil handwriting—an ancient calligraphy—is imprinted on Oligocene Epoch shales. Incredibly detailed and exquisitely beautiful impressions of insects and leaves exist in such profusion that the Florissant Fossil Beds form the most extensive fossil record of its type in the world.

Impressions of dragonflies, beetles, ants, butterflies, spiders, fish, some mammals and birds, and innumerable insects that lived here 34 to 35 million years ago are almost perfectly preserved. Fossil leaves from birches, willows, maples, beeches, and hickories, and needles from fir and giant sequoia trees are abundant. There are even palm leaves which prove that a warmer subtropical climate once prevailed here.

Though the fossil impressions can be seen only in displays at the visitor center, giant petrified tree stumps have been excavated and can be viewed by visitors touring the park.

Fossils, nature's vivid reminders of long-past life, take many forms. The insects and leaves found at Florissant are carbon remains of the originals.



Florissant is a classic locality known to many scientists. Historically significant to the geologist, the paleontologist, the entomologist, and the botanist, it is the home source for the numerous fossil insects and leaves that grace the exhibition halls and research rooms of many institutions of learning.



### The Changing Earth and a Story in Stone

The fossils here are preserved in the sedimentary rocks of ancient Lake Florissant, which existed in this valley during Oligocene times — roughly 38 to 26 million years ago. Lake Florissant was formed when flows of lava and mud from nearby Thirtynine Mile volcanic field, 24 kilometers (15 miles) to the southwest, dammed one or more streams. The sickle-shaped lake was 19 kilometers (12 miles) long and up to 3.2 kilometers (2 miles) wide.

Intermittent volcanic activity during a period of about 500,000 years showered millions of tons of ash, dust, and pumice into the air. Much of this fragmented material, carried by the wind, settled over and around Lake Florissant, trapping a large variety of plants and animals. Some of these life forms were carried into the lake and settled to the bottom, where they became embedded in layers of very fine-grained ash. There they became fossilized as the ash compacted to form shale, a thinly layered sedimentary rock.

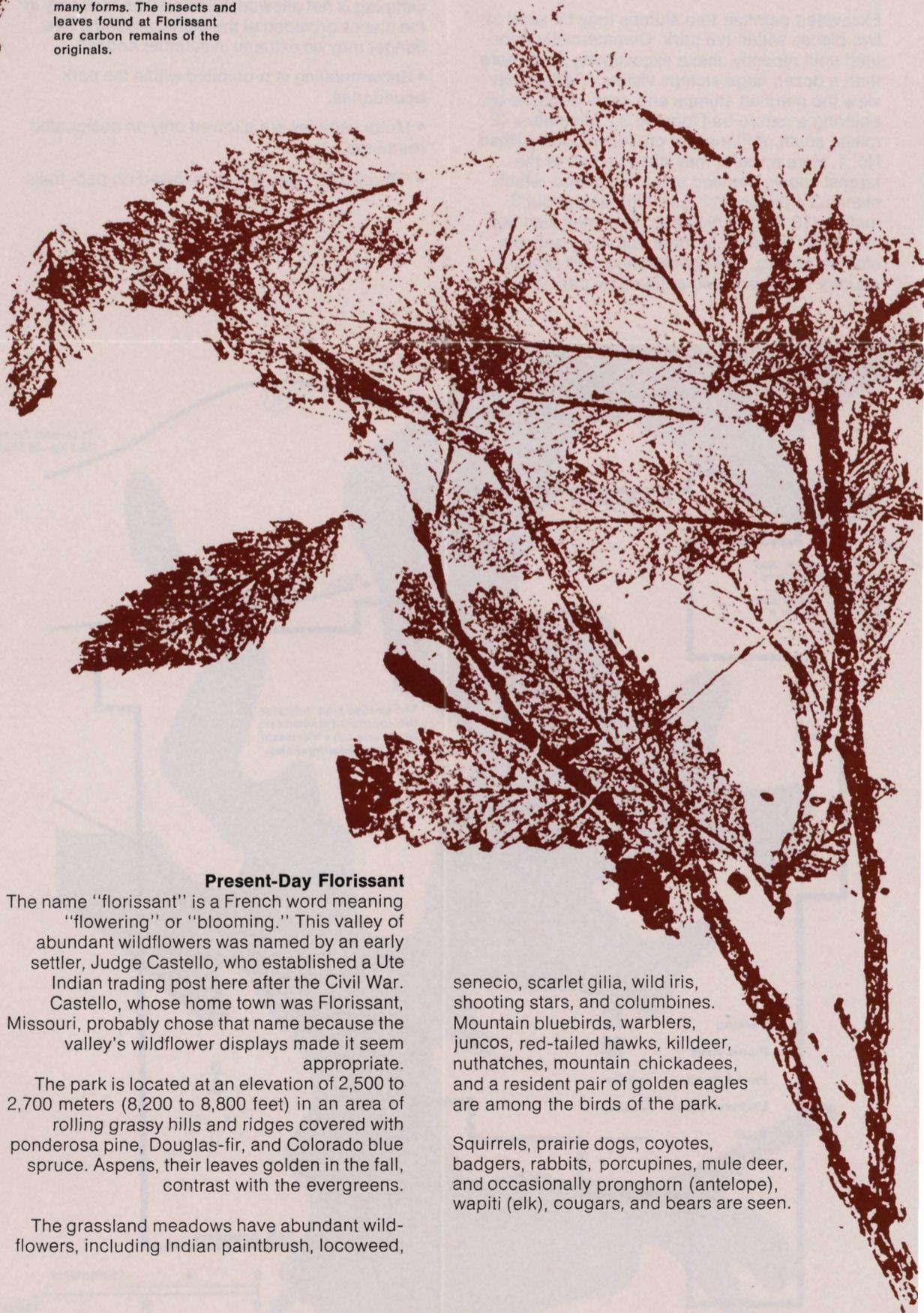
During the same period of volcanic activity, mudflows buried forests that grew around the lake and petrified them in place. Eventually the lake itself was filled and overrun by these volcanic products. Thus the fossil-rich lake shales were preserved for millions of years beneath a hard volcanic cover. More recent erosion has segmented this volcanic cover, exposing the lakebed in its present position.

The rare quality of Florissant lies in the delicacy with which thousands of fragile insects, tree foliage, and other forms of life—completely absent or extremely rare in most paleontological sites—have been preserved in stone.



### Harvesting a Fossil Treasure

The fossils of the Florissant lakebed were discovered by Dr. A. C. Peale of the U. S. Geological Survey in 1874. Since then, scientists from around the world have dug into the shale and have removed over 80,000 specimens, identifying more than 1,100 species of insects, including almost all the fossil butterflies of the New World, over 140 plant species, and several species of fish, birds, and small mammals. Several petrified tree stumps have also been excavated.



### Present-Day Florissant

The name "florissant" is a French word meaning "flowering" or "blooming." This valley of abundant wildflowers was named by an early settler, Judge Castello, who established a Ute Indian trading post here after the Civil War. Castello, whose home town was Florissant, Missouri, probably chose that name because the valley's wildflower displays made it seem appropriate.

The park is located at an elevation of 2,500 to 2,700 meters (8,200 to 8,800 feet) in an area of rolling grassy hills and ridges covered with ponderosa pine, Douglas-fir, and Colorado blue spruce. Aspens, their leaves golden in the fall, contrast with the evergreens.

The grassland meadows have abundant wildflowers, including Indian paintbrush, locoweed,

senecio, scarlet gilia, wild iris, shooting stars, and columbines. Mountain bluebirds, warblers, juncos, red-tailed hawks, killdeer, nuthatches, mountain chickadees, and a resident pair of golden eagles are among the birds of the park.

Squirrels, prairie dogs, coyotes, badgers, rabbits, porcupines, mule deer, and occasionally pronghorn (antelope), wapiti (elk), cougars, and bears are seen.

### How to Reach Florissant

The park can be reached by taking U.S. 24 west from Colorado Springs to the small town of Florissant, 56 kilometers (35 miles) away. At the town center, turn south toward Cripple Creek on the unpaved Teller County Road No. 1. The park is 0.8 kilometer (½ mile) from the town of Florissant.

There are no overnight accommodations within the park. However, motels are in the nearby communities of Woodland Park, Divide, Florissant, Lake George, and Cripple Creek. Several campgrounds are in or near these communities as well as in the surrounding Pike National Forest. Many are open seasonally. Food, fuel, ice, and public telephones are also available in these towns. There are no public telephones in the park. The nearest medical facilities are in Cripple Creek or Woodland Park, both about 26 kilometers (16 miles) from the park. The nearest hospital is 56 kilometers (35 miles) away in Colorado Springs.

### Visitor Activities

Florissant Fossil Beds has been acquired only recently by the National Park Service; thus facilities are limited. The headquarters and museum should be your first stop. Here a ranger will help you plan your visit. Also in the park are a self-guiding environmental study area and nature trail, a small picnic area, and restrooms.

Excavated petrified tree stumps may be seen in two places within the park. Commercially operated until recently, these excavations have more than a dozen large stumps visible. Visitors may view the petrified stumps and shale deposits by entering a nature trail located 3.2 kilometers (2 miles) south of Florissant on Teller County Road No. 1. Here a visitor may observe one of the largest known petrified sequoia stumps, which stands 3.4 meters (11 feet) high and about 3 meters (10 feet) in diameter. One may also see the "Trio," a group of three adjoining sequoia stumps. Hiking, horseback riding, and cross-country skiing are also enjoyed by park visitors.

### Safety and Your Visit

**Heavy snows in winter may occasionally cause hazardous driving.**

**Ticks spreading Colorado tick fever and Rocky Mountain spotted fever are common here in spring and early summer. If you are hiking, tuck your pants-legs inside your socks and check yourself for ticks periodically. If you have any imbedded ticks, check with a ranger or physician.**

### Regulations

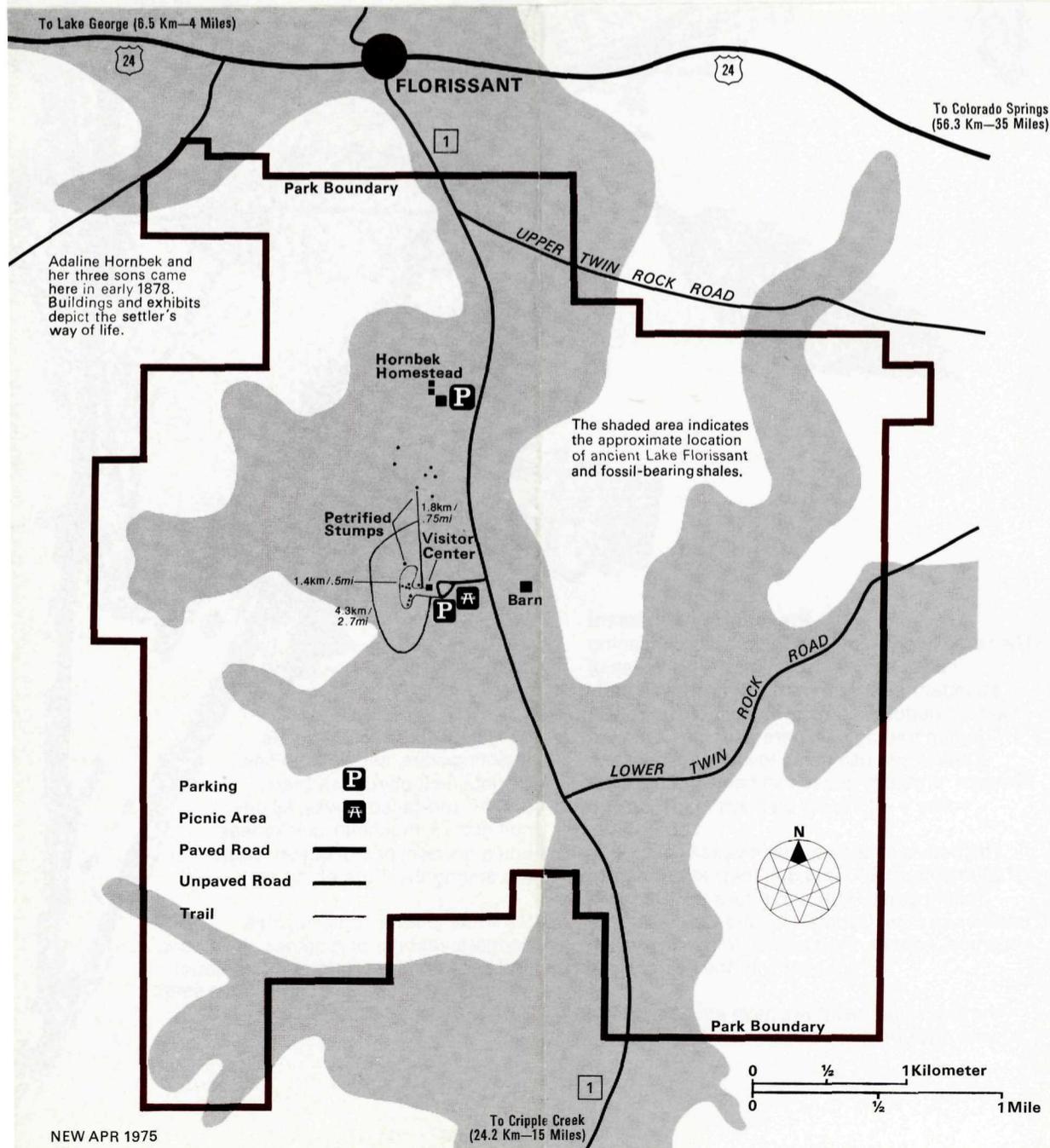
To help preserve the natural beauty and the historic and scientific values of this park, certain regulations have been established.

- Fossils, petrified wood (no matter how small the piece), rocks, wildflowers, and other natural or historical features must not be removed or disturbed by visitors. Violators will be subject to a fine.
- Pets are not allowed on park trails.
- Wildlife must not be fed or molested in any way. Hunting and trapping are prohibited; firearms must be cased, broken down or otherwise packed.
- Picnicking is permitted in designated areas where trash receptacles have been provided, but camping is not allowed. Fires may be built only in the places provided at the picnic grounds. Fire danger may be extreme in summer and fall.
- Snowmobiling is prohibited within the park boundaries.
- Motor vehicles are allowed only on designated roadways.
- Off-road bicycles are not allowed on park trails.

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### Administration

Florissant Fossil Beds National Monument, established by Congress on August 20, 1969, is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Box 185, Florissant, CO 80816, is in immediate charge. The park is open daily 8 a.m. to 4:30 p.m. and during the summer remains open until 7 p.m. The park is closed Thanksgiving, Dec. 25, and Jan. 1.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

**National Park Service**  
**U.S. Department of the Interior**