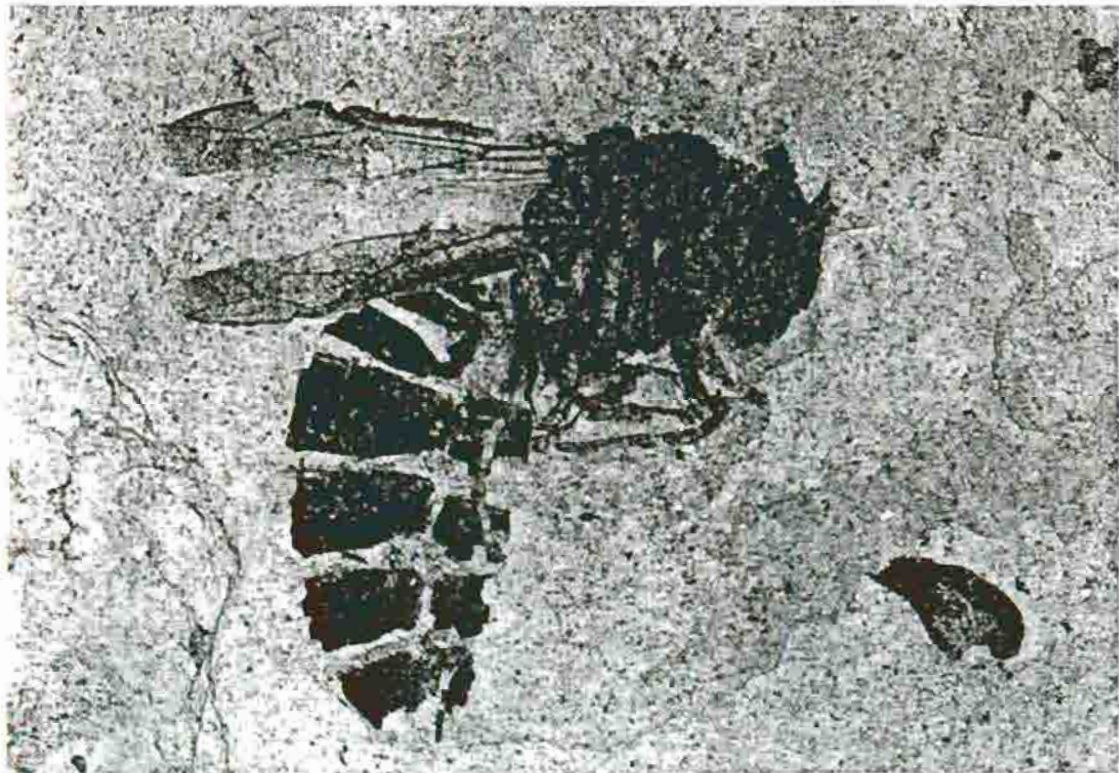


**A HISTORY OF  
FLORISSANT FOSSIL BEDS  
NATIONAL MONUMENT**

**IN CELEBRATION OF  
PRESERVATION**





## PREFACE

The purpose of this report is to provide the Florissant Fossil Beds National Monument staff with historical background on the fossil beds and petrified forest, and the events leading up to the creation of the Monument on August 20, 1969. This project was envisioned by Margaret Johnston, Chief of Interpretation and Resource Management, in anticipation of the 25th Anniversary. I would like to thank her for her many creative ideas. I would also like to thank Doris Kneuer for her help with the Monument archives, Dottie Depperschmidt for helping with the cover design, and the rest of the Florissant staff.

Since this paper was written primarily as a reference and resource, I documented sources within the text for easier reference. All sources are listed in the bibliography. I also made extensive use of quotations, letting writers from the past tell their stories in their own words. You will notice that the writing style of the late 1800's is quite different from ours.

History should be a search for the truth about the past. Often, this goal is unattainable. Information may be lost; sometimes it is wrong or misrepresented.

"Part of the danger is that facts, as Stephen Jay Gould observes, 'achieve an almost immortal status once they pass from primary documentation into secondary sources...' And we have not been trained to be critical of what we read. Healthy skepticism is essential for liberation, for good interpretation." [Glen Kaye, Chief, Interpretation and Visitor Services, SWRO, in "Interpretation," NPS, winter, 1993]

Secondary sources, particularly newspapers, should always be read with the proverbial grain of salt. (Remember this when reading the numerous newspaper quotes in this paper. Some are quite accurate, while others may be close to fiction.) Primary sources - letters written at the time, diaries and eyewitness accounts are better, but even these are colored by the personality of the writer. Oral histories are not always accurate. Usually an "old timer" is reminiscing about events many years in the past. Such information should always be confirmed, simply because it is hard to remember events accurately that occurred 50 years before. Oral histories best serve to bring out the feelings and color of the "old days." Often, it takes 2 or 3 sources to substantiate an historical "fact."

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I would like to thank all the people who assisted this research: Jodi Jones, Debbie Mikash and others at Penrose Library, Western History Department, Colorado Springs; Tutt Library, Colorado College, Colorado Springs; Barbara Foley and the staff at Colorado Historical Society Library, Denver; Bruce Hanson and others at the Denver Public Library, Western History Department; Sharon Uhler at the Starsmore Center for Local History, Pioneer Museum, Colorado Springs; Colorado School of Mines Library, Golden; L.D.S. Family

History Center, Colorado Springs; El Paso County Recorder's Office; Teller County Recorder's Office; Joyce Arrizu at the El Paso County Department of Vital Statistics, Colorado Springs; Andrea Mark at the Chicago Public Library, Chicago, IL; Elizabeth Lackman at the Ute Pass Museum, Woodland Park; Woodland Park Public Library; Elaine Watson and others at the USGS Library, Denver; Joan Howard and the staff at the National Archives, Denver; The National Archives, College Park, MD; Trudi LaFramboise, Special Collections, Rollins College Library, Winter Park, FL; Estella Leopold, University of Washington; Richard and Dorothy Bradley of Colorado Springs; Celinda Kaelin of Florissant; Leo Kimmett of Canon City; Rick Sanborn of Florissant.

I have compiled an appendix listing the resources investigated while researching this history. This may save futures researchers from covering the same ground.

The bibliography contains general references pertaining to the fossil beds, the petrified forest, or FLFO. The Monument has an extensive scientific bibliography available in its files, as does the USGS Library (on computer discs) in Denver.

Park Service acronyms used in this paper are; FLFO: Florissant Fossil Beds National Monument; ROMO: Rocky Mountain National Park; MWRO; Midwest Regional Office; RMRO: Rocky Mountain Regional Office.

I hope this paper will be interesting and useful to the Monument staff, as well as the general public.

Jim McChristal  
April, 1994



In 1969, Congress established Florissant Fossil Beds National Monument "to preserve and interpret for the benefit and enjoyment of present and future generations the excellently preserved insect and leaf fossils and related geologic sites and objects at the Florissant lake beds." [Public Law 91-60 (83 STAT. 101) August 20, 1969]

"The singularity of the Florissant lake beds... is perhaps more understandable when one considers that preservation of land biota as fossils is of rare occurrence. Such preservation requires unusual conditions or events to ensure burial and compaction before decay of the living material can take place. This is especially true for delicate objects such as leaves and insects..." [Elanor Gamer, National Parks Magazine, July, 1965, p 16].

\* \* \*

Just what were the unique circumstances that created the geology of Florissant as it exists today?

About 35 million years ago (at the Eocene-Oligocene boundary, about 30 million years after the extinction of the dinosaurs) the land that is now Florissant was a gentle valley, supporting ferns, and forests of oaks, elms, magnolias, and giant sequoias.

"Suddenly, a series of earthquakes rocks the valley as a volcano several miles away begins to erupt. Mudflows move toward Florissant, wiping out everything but the massive trunks of the redwoods. The mud... buries the trees up to fifteen feet with debris, killing them. The portions of the trunks above the mud begin the decay process, while the portions of the trunks in the mud begin the slow petrification process." [Saenger, Window to the Past, 1982, p 4].

The mudflows also dam a small, southward-flowing stream, which creates a shallow lake perhaps 12 miles long. Gradually life returns to the devastated country. Trees and shrubs sprout. Insects, birds and mammals are attracted to the lake shore, while fish swim in its warm water. Periodically, the volcano erupts, raining clouds of dust, ash and poisonous gas over the area, and trapping the unlucky inhabitants in thin layers of mud on the lake bottom. "For hundreds, perhaps thousands, of years the sequence is repeated... Gradually, the layers of volcanic material are built up to a thickness of forty-five feet in some places. With time, the buried mud would become shale." [Saenger, p 4]

Eventually, the lake dried up and was covered by a final mudflow of thick, cement-like breccia. It is this layer that protected the fragile shale beds during the uplift of the Rocky Mountain region. The uplift caused faulting and erosion, which removed the center of the old lake, leaving only remnants of the shoreline.

"Insect fossils are exceedingly rare for, unlike the massive bones of the dinosaurs, insects are small and delicate." [Saenger, p 7]

So how did the fossils form? "Plants and insects were trapped by the ash. Eventually, the ash turned into rock, leaving carbon imprints of once living organisms." [Saenger, p 1].

\* \* \*

Some 35 million years later, as the last Ice Age ended, humans entered Florissant Valley. About 20 archeological sites (rock shelters and lithic sites) have been located in the Monument. Plano points (a distinctive style of projectile point) have been found, which date to an occupation as far back as 5,000 to 8,000 years ago. These people, known as the Archaic Culture, were hunter-gatherers who probably used the area in a seasonal movement from the plains and lower foothills to the mountains. This occupation may have lasted up to 1200 A.D.

The Utes occupied the area when Spanish explorers arrived in the 1500's. [Culpin, "Historic Resource Study, Florissant Fossil Beds National Monument," 1979, chapter 1] . Although they adopted a plains Indian lifestyle, with horses and tepees, they are a Shoshonean people, related to the hunter-gatherer Paiutes of southern Utah. As with the Archaic people, the Utes would move with the seasons in search of food and better weather, following the ancient Ute Pass Trail. The Garden of the Gods, at the foot of Pikes Peak, was one favorite wintering spot, while summers were often spent in the Florissant valley or South Park. Warfare with the Arapaho and Cheyenne over hunting territory was common. Scarred ponderosa pines, where the Utes peeled the bark off for food, can be still be found in the Monument.

"The Indians were all through the country and some big camps were located near our place [in the petrified forest]... They were very colorful because every tepee had a figure of a warrior or a horse painted on one or both sides of it with the bright red, green, [and] yellow paint that only the Indians know how to make... They usually chose a level place near a little stream where they pitched their tepees and then after the ponies were relieved of their packs, they were turned loose to graze on the mountain grass which was very plentiful...

"...most of the white women and children of the country were afraid of them. Small wonder though, for their unusual appearance was enough to strike terror to anyone's heart. They always wore bright colored hawk or eagle feathers in their straight black hair. On each cheek was a thin vertical streak of vivid yellow and flaming red paint." [Thompson, Daughter of a Pioneer, 1935, pp 17-18].

Although the local Utes and their chief, Colorow, were often a fright and an annoyance to the settlers, barging into a cabin

demanding biscuits or coffee, they were rarely a physical threat. Florissant historian Leo Kimmett relates one story of a rancher named Marksberry, who was killed while retrieving a stolen horse by a warrior named Tab-We-Ap. [Kimmett, Florissant, Colorado, 1980, pp 13-14] Generally, both groups tolerated each other, with the Utes often working as scouts for the army. But after the infamous White River massacre in western Colorado in 1879 (caused mainly by the obstinacy of agent Nathan Meeker and a misunderstanding between soldiers and Utes), local citizens began to pressure state and federal officials to move them. In 1881 the Utes, forced to leave the land they had occupied for generations, followed soldiers to newly created reservations in southwest Colorado and eastern Utah. [Kimmett, p 17; McTighe, Roadside History of Colorado, 1982, pp 226-27, 291-94; Brown, Bury My Heart at Wounded Knee, 1970, p 372-389]

What the Utes thought of the great stone trees was never recorded.

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No one knows who was the first non-native to see the petrified forest. In 1867, the Rocky Mountain News reported hearing of fossil wood being found in "South Park," which at that time included the Florissant area. [5/6/67] Two years later the same paper reported;

"Mr. N.H. Rice has placed us under obligation to him for a large fragment from the remarkable petrified stump west of Pikes Peak. Although imperishable stone, it yet retains its woody fibre and appearance. The stump is 14 feet in diameter. There are many other petrifications in the same neighborhood." [Rocky Mountain News, 5/14/69]

In June of 1870 James Castello settled along the Ute Pass Trail at Twin Rocks Creek. He had left Missouri in 1859 for the gold fields of Central City and Fairplay, where he served as a county judge for one term. He and his wife, Catherine, soon established a general store and hotel by their new home, which they operated for many years. When a post office was established in 1872, [Rocky Mountain News, 12/21/1872], he named it Florissant (French for 'flowering') in remembrance of his home town in Missouri. [Kimmett, p 7]

A remarkably detailed newspaper story from 1871 indicates that both the stumps and the fossils were widely known at that time.

" About a mile from Castello's ranch in Florissant Valley, is a petrified forest near which are found, between sedimentary layers, most beautiful imprints of leaves differing entirely from any that grow in the valley now-a-days. Many of the imprints closely resemble beech leaves. One specimen we found gave as reprint of a shrub of some kind, perfect in every leaf, and also showing one flower and several buds." [Daily Central City Register, 4/18/1871]



Reverend David P. Long, a Civil war veteran from Iowa, and his family arrived at Florissant in 1871 or '72, looking for a homestead. Fascinated by the "petrified forest," he built a one room cabin about one and a half miles south of Castello's ranch. The story is told that, while digging a ditch to divert rainwater from his house, he uncovered a giant petrified stump (the Big Stump), as well as leaf fossils from the shale beds. [West, "Fossils or A-frames?," Rocky Mt. West, September/October, 1969, pp 27-28] Long never filed on the land because Florissant had not been surveyed for homesteading. He stayed 2 years and then went to Salt Lake City, leaving his property in the care of his brother-in-law, Frank Sens. When Long returned in 1877, he found that Sens had sold his site to Adam G. Hill in the fall of 1874, so he settled near Four Mile Creek. [Thompson, pp 22, 29-30; Hill, "Pre-emption Proof," copy in FLFO archives, #1272-065] Sixty years later his daughter, Atlanta, chronicled their adventures.

"...One large stump in the forest was 22 feet in diameter. Some geologists claim it had been a California Redwood... there was a mountain of shale... covered with the impressions of tropical leaves... Pa spent many days there digging, and collected many wonderful specimens. Professors from Colorado College came to see us... and Pa gave them... any specimen they wanted. They hauled away many wagon-loads... Father was driving across the country one day when he saw some bones sticking out of a big ditch... He dug them out and found them to be a rib or tusk, and tooth of a mastodon." [This find has never been confirmed.] [Thompson, "Our Home in the Petrified Forest", Colorado Magazine, May, 1934, p 103-04]

Thus began a record of thoughtless destruction that would continue for 100 years. Early reports indicate that many of the petrified trees stood well above ground level, with numerous logs and fragments scattered about the valley. But by the time the National Park Service gained title to the land in 1973, there was hardly a flake of petrified wood to be seen, and the only parts of the stumps visible were those excavated by the commercial operators.

Ironically, though early reporters decried the damage being done, there was never a serious effort made to protect the "forest" or the fossil beds. There are probably two reasons for this inertia. First, the land was privately owned, and would have to be bought or taken by a government agency. (It is much easier to establish a park on public land.) Second, the concept of public parks and monuments was in its infancy. The first national park, Yellowstone, had just been established in 1872. The Antiquities Act, which created a method for protecting unique natural wonders and historic sites, was not passed until 1906, and the National Park Service was not established until 1916. If the "forest" had been close to a larger town, as the Garden of the Gods was to Colorado Springs, it might have become a city park. Isolated in the mountains, it remained ranch land, and a place to collect



"curiosities."

As early as 1872 a regional newspaper documented the impact from visitors.

"One of the wonders of this part of the world is the "Petrified Forest" which is situated about halfway between Colorado Springs and Fairplay. This remarkable relic of former days, however, bids fair to disappear very shortly, unless the increasing crowd of tourists cease their work of destruction. Everyone must needs take a specimen, and some of the stumps are "growing smaller" at a very rapid rate. Mr. Bradshaw, who has a squatter's claim on a portion of the "Forest," informs us that he will be glad to show strangers where specimens may be obtained without injury to the upright stumps..." [Who Bradshaw was, and where he lived, is unknown, but he seems to have had an unusual environmental sensitivity for that time.] [Out West, June 13, 1872].

In 1876 the Georgetown Centennial reported; "Florissant... has become a noted resort for tourists passing through that portion of the Territory. Until about 3 years ago the locality went by the name of The Petrified Stumps, there being within a circuit of about a mile in diameter 15 or 20 of, probably, the largest petrified stumps of trees in the world... The largest one, 6 years ago, measured 22 feet in diameter, but each succeeding year it became less, owing to the depredations of specimen hunters... One that should have been left as a monument of the Tertiary Period, during which it flourished, was about 15 feet in height, but it has been demolished by the hand of some vandal, and now, nothing but a few scattering fragments remain. The land on which these mammoth stumps stand, is now principally occupied by settlers, and efforts are being made to preserve these remnants of a former age." [The Centennial, Georgetown, Colorado, February, 1876]

A few months later the Colorado Springs Gazette wrote the first of many stories about the shipment of stumps back east; "On the ranch of Adam Hill at the East end of South Park are the remains of what was at some day, so far back in time as to be lost in the shadows of antiquity, a redwood grove, now only a shattered collection of petrified stumps... These stumps are very large in circumference and about 20 in number... Mr. Hill is now in correspondence with parties in Philadelphia for the transportation of this primeval forest to the Centennial Exhibition." [Colorado Springs Gazette, 4/8/1876]

One writer documented the damage from souvenir hunters while "carrying away" his own samples.

"...Our people are neglecting a neighboring point of interest, which ought to be held out as an attraction to tourists. Just beyond Copeland's [sic] ranch, on the South Park road, commences a line of stumps of trees of unknown kind, in all stages of petrification. This line of petrified stumps runs across country all

the way to Florissant, but at the latter point most of the good samples have been carried away. We brought away some beautiful samples of 'knots' and petrified gum." [Colorado Springs Gazette, 4/26/1884]

The coming of the Colorado Midland Railway to Florissant in 1887 made tourist access even easier and encouraged grandiose schemes of moving the stumps.

"...the road descends a rather steep grade to the valley where the 'forest' is located. The valley is broader here than elsewhere, and here and there scattered over the bottom and lower slopes of the surrounding hills are little mounds of white petrified chips marking the spots where the tops of the stumps reach the surface. Only one of the stumps as yet has been entirely uncovered, and to this most of the visitors go first. It is on the edge of a small grove of pine on the west side of the valley. Over it is a rough scaffolding from which are suspended several saws still deeply imbedded in the stump several years ago. When the Midland was first opened, someone conceived the idea of transplanting the stump to Manitou, but it was found that it could not pass through the tunnels of the road...

"The expenditure of a few thousand dollars by the town of Florissant in securing title to the land, digging out the stumps, and grading the grounds would make it a very great point of attraction for curiosity and pleasure seekers..." [Colorado Springs Gazette, 6/24/1890]

"The oldest settlers thereabouts remember that 20 years ago there were 20 of these petrified trunks standing erect beside numerous petrified logs lying over the ground. All have been removed by tourists and relic hunters until now one of the greatest and rarest natural curiosities of the world has been despoiled. The trunks and logs have been sawed up and broken to pieces and taken East..." [The Creede Candle, 2/10/1893]

Although the petrified wood was the most easily gathered souvenir, the shale fossils did not escape damage either.

"The Midland's famous Wildflower Excursions proved to be a summertime source of spending money for the children of Florissant. We boys looked forward eagerly to the summer tourist season and daily operation of the flower train.

"... a short distance from the Midland right-of-way was a large fossil bed. It was the practice of the railroad to stop the excursion train there and let the passengers... hunt for fossils. We kids were always present when the train stopped, and would sell fossils to those tourists who were too lazy to find their own..." [Dr. H.A. Burton, in Cafkey, Colorado Midland, 1965, p 254]

"Underlying and cropping out on many of the hillsides of this same region is fossil rock. This is closely allied to slate,

generally in thin layers from the thickness of grass to that of an inch. Between these layers are found the impress of fish, reptiles, insects, leaves... etc. Many of the specimens... on exhibit in Manitou, Colorado Springs, and Denver were gathered here. Doubtless this is the richest field for curiosity and relic hunters east of the Continental Divide, and is now easy of access and largely visited by tourists..." [Colorado Springs Gazette, 5/3/1890]

Scientists visiting the area also noted the vandalism.

Renowned entomologist Samuel Scudder recorded; "... the famous petrified trees, huge, upright trunks , standing as they grew, which are reported to have been 5 or 6 meters high, at the advent of the present residents of the region. Piecemeal they have been destroyed by vandal tourists, until now not one of them rises more than a meter above the surface of the ground, and many of them are entirely leveled; but their huge size is attested by the relics..." [Scudder, "The Tertiary Lake-basin at Florissant, Colorado, between South and Hayden Parks," Bulletin of the U.S. Geological and Geographical Survey of the Territories, Vol VI, 1881, pp 283-284]

Arthur Lakes, a geologist and professor at the Colorado School of Mines, visited Florissant with Scudder in 1877. When he returned in 1899 he noted; "... we came upon the remains of stumps of gigantic fossil trees... They vary from 8 to 10 feet in diameter. In former years many of these stood up several feet above the level meadow, but they have been mostly razed to the ground by visitors and vandals." [Lakes, "The Florissant Basin," Mines and Minerals, 1899, p 179]

Botanist Junius Henderson wrote, "Many giant fossil sequoia stumps and logs are found in the southern part of the lake basin. These have been visited by hundreds of tourists, and large quantities of 'petrified wood' have been carried away by relic-hunters. [Henderson, "The Tertiary Lake Basin of Florissant, Colorado," The University of Colorado Studies, #3, June, 1906, pp 146-47]

Geologist F.M. Brown remembered, "50 years ago, when I first worked the area [1931], there were still fossilized logs on the ground..." [Brown, "Rocky Mt. Section 40th Annual Meeting, University of Colorado, Field Trip #8 Guide Book," 5/5/1987, FLFO files]

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After the Civil War it was not only miners, cattlemen, homesteaders and outlaws that headed west. Scientists found a vast, uncharted land, with new discoveries for anyone with the energy to look. Some of the most notable expeditions were the four geographical surveys funded by the federal government, led by Lt. George Wheeler, Clarence King, John Wesley Powell, and Ferdinand V. Hayden. In addition to mapping and surveying for minerals, these



parties along brought biologists, botanists, geologists, artists and photographers in an attempt to develop a more complete understanding of the American west. [Exploring the American West - 1803-1879, NPS Handbook 116, 1982, pp 83-95, 114-124]

Hayden, whose 1871 survey of Yellowstone helped to create the first national park, sent the first scientific team to the Florissant valley in 1873.

However, it was a young amateur, Theodore L. Mead, who made the first scientific collection at Florissant. Mead, a 19 year old Cornell student, was in Colorado in 1871 at the request of entomologist W.H. Edwards to "collect everything with 6 legs." [Brown, "Interview," 1989, p 55] He stopped one evening at the Hartsel Ranch in South Park, where he heard stories of delicate insect fossil and giant tree stumps. He rode to Castello's, and stayed for a few days, gathering 23 insect and leaf fossils. (The location of his dig is uncertain.) These he sent to Edwards, who sent them on to paleoentomologist Samuel Scudder at Harvard.

Mead wrote his aunt, "I started this letter at station 39. Before I had come to finish it I heard wonderful tales of petrified stumps and fossil insects, 30 miles away. So I hired a horse and went there finding all as represented. I found nearly 20 insects and brought back about 25 lbs. of petrified wood. Some of the stumps are 20 feet across. They are in all respects similar to ordinary stumps but converted to stone." [Mead, "letter to Mrs. S. Strang," 9/13/1871, in Brown, "letter to FLFO," 3/18/1981]

In the spring of 1873, A.C. Peale of Hayden's survey team, collected fossils, mostly of water beetles, near where Highway 24 enters Florissant Valley from the east. [Brown, 1989, p 56] In 1874 he published the first scientific report on the fossil beds.

"...we cross into Hayden Park. This name has been given to the low, rolling country to the west of Pike's Peak. ...around the settlement of Florissant is an irregular basin filled with modern lake deposits. The entire basin is not more than 5 miles in diameter. ...just below Florissant, on the north side of the road, are bluffs not over 50 feet in height, in which are good exposures of the beds... Scattered around are fragments of a trachyte which probably caps the beds. ...the point of overflow from which this material came is probably to the southward. The lake basin may possibly be one of a chain of lakes that extended southward... About one mile south of Florissant, at the base of a small hill of sandstone, capped with conglomerate, are 20 or 30 stumps of silicified wood. This locality has been called "Petrified Stumps," by the people in the vicinity. The specimens of wood are not particularly good.' [Peale, "Report on the South Park Region, Colorado," U.S. Geological and Geographical Survey of the Territories, Annual Report #7, 1874, p 210]

Which scientist "discovered" the fossil beds? Mead collected there first, but Peale published the first report, which usually

establishes priority.

After receiving Mead's fossils, it took Samuel Scudder several years to get to Florissant. He excavated the so-called "Scudder pit" just west of the Big Stump in 1877, assisted by F.C. Bowditch and the landowner, Adam Hill. Geologist Arthur Lakes surveyed the valley. In just 5 days they collected nearly 5000 fossils. [Drummond, "History of the Fossil Digs At Florissant Fossil Beds," FLFO files, p 2] Scudder studied the insects himself, while sending the plants to Leo Lesquereux, and the vertebrates to E.D. Cope. He eventually published over 25 scientific papers about his finds in the fossil beds.

Scudder wrote, "The insects preserved in the Florissant Basin are wonderfully numerous, this single locality having yielded in a single summer more than double the number of specimens which the famous localities at Oeningen, in Bavaria, furnished... in 30 years. Having visited both places I can testify to the greater prolificness of the Florissant beds." [Scudder, 1881, p 288]

Many other scientists and institutions excavated at Florissant over the next 90 years. The number and chronology of these expeditions is not well documented. The following is a list of some of the more noteworthy investigations.

Three students from Princeton (then called the College of New Jersey), William Scott, Henry Fairfield Osborn, and Frank Spier, dug at Florissant in 1877, primarily for vertebrates. [Drummond, p 2; Brown, 1989, p 37]

Scott later recalled, "No plan of exploration had been made, no localities suitable for collection had been fixed; in fact, the expedition threatened to deteriorate into an aimless wandering about. At Florissant we happened on some fossiliferous beds that afterwards became famous for their beautifully preserved leaves, insects, fishes, and even birds. We made quite extensive collections and arranged with Mrs. Hill, owner of the land, to forward additional material to Princeton... We had gathered many species new to science." [W. Scott, Some Memories of a Paleontologist, 1939, p 62]

Speaking at the 31st meeting of the American Association for the Advancement of Science in Montreal in 1882, geologist Robert B. Warder described the physical properties of the stumps that he observed during a visit to Florissant in September of 1872. ["Proceedings; American Association for the Advancement of Science," 1883, pp 398-99] Plant fossils were gathered by Dr. Hambach and the data published by Dr. Kirchner in 1898. [MacGinitie, Fossil Plants of the Florissant Beds, Colorado, 1953, p 4; Cockerell, "Florissant; A Miocene Pompeii," Popular Science Monthly, August, 1908, p 114] A geologist from the Smithsonian reportedly visited the site in 1899. [Denver Times, 8/13/1899]

The United States Geological Survey mentioned the fossil beds



in its 1898-99 Annual Report; "In the soft Shale Rock are found fossil leaves, fruit and twigs of trees closely allied to the living species of redwoods or sequoias of California, to ashes, alders, walnuts, chestnuts, elms, sumacs, hollies, and other trees and shrubs. Fossilized stumps of prehistoric trees, apparently sequoias, still exist." Garnett, 20th Annual Report of the U.S.G.S to the Secretary of Interior, Part V, Forest Reserves, 1898-99, pp 46-47]

Scott and Osborn returned to Florissant in 1902, representing the British Museum and the American Museum of Natural History. [Drummond, p 2] Charles Sternberg, and George and Seifert Rohwer collected insect fossils for the Carnegie Museum in Pittsburgh in 1904 [Drummond, "Museum and University Collections with Significant Holdings of Fossils from the Florissant Shales of Colorado," 1993, in FLFO files, p 7] Junius Henderson of the University of Colorado collected in 1905, and in 1906 and '07, Cockerell and Wheeler excavated under the sponsorship of the American Museum of Natural History, Yale, and the British Museum. [Cockerell, 1908, p 115; Drummond, "History of the Fossil Digs at Florissant Fossil Beds," p 3] George Sternberg collected for the American Museum in 1909, and in 1912, H.H. Wickham of the University of Iowa collected numerous specimens of butterflies. [NPS, Florissant Fossil Beds National Monument - A Proposal, 1962, p 10]

In 1911, J.J. Farnsworth and members of the British Museum inspected the fossil beds, in the company of Professor Strieby of Colorado College.

"... 'This is the greatest fossil field in the world,' said Prof. Farnsworth, 'and I am afraid the people of Colorado do not realize what it means to the state and nation. We have come all the way from London to investigate these marvels, and if the fields were 5,000 miles away from here, Colorado Springs and Denver people would be paying their good money to visit them...'" [Denver Post, 8/14/1911]

It is interesting to note that Strieby states, "... all scientists agree that these... fossils belong to the Tertiary period and are anywhere from 1 to 4 million years old." [Denver Post, 8/14/1911] Back then, scientists had a clear concept of relative time, that is, which fossils were from older or younger periods than others, but they had no method of measuring the age of the rock. Therefore, they had no idea that the Florissant shales are 35 million years old.

Harvard paleoentomologist Frank Carpenter studied over 12,000 ant fossils from Florissant, beginning in 1927. [Drummond, "History of the Fossil Digs at Florissant Fossil Beds," p 3] F. Martin Brown, who spent years researching the various collections of Florissant fossils, made his first visit in the spring of 1931. [Brown, 1989, p 1]

Dr. Harry MacGinitie of Humboldt State began his work at Florissant around 1936, culminating in his book, Fossil Plants of



the Florissant Beds, Colorado, and his untiring efforts to bring the fossil beds under the protection of the National Park Service.

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Eventually, someone was going to see the commercial potential of attracting tourists to the petrified forest. The earliest known development, located near the Big Stump, was the Coplen Petrified Forest Resort.

In 1924, John D. Coplen wrote, "I have owned this place for nearly or quite 40 years..." [Coplen, "letter," November, 1924, in FLFO archives] The Colorado Springs Gazette referred to the area as "Copeland's [sic] ranch" in an article dated April 26, 1884.

Coplen was reputed to have made a fortune from copper mines in Utah and Arizona, and was fascinated by the giant stumps. [Kimmitt, p 38] He was one of the members of the Colorado Museum Association, which bought the land from Adam Hill in 1883. [Warranty Deed, Book 47, p 243, 5/2/1883, El Paso County Records, copy in FLFO archives]

"The importance of saving the natural curiosities, animal and geological, of our state from the specimen dealer and curiosity hunter of the east caused several of our enterprising citizens... in 1883... [to] incorporate the Colorado Museum Association... purchasing of Mr. Adam C. [sic] Hill,... the Petrified Forest Ranch..." [Denver Tribune Republican, 2/12/1886]

The Association leased the land for many years. Scudder wrote in 1890 that the Hill ranch was "...now owned by Mr. Thompson." [Scudder, "The Tertiary Insects of North America," U.S. Geological Survey of the Territories, 1890, p 21] Thompson, who must have been a lessee, might have been related to Attie Long Thompson.

In spite of the many articles written about the petrified forest between 1884 and 1920, we do not know if the ranch was operated as a tourist attraction. In 1899 one writer described the area as "2 farms dotted with petrified stumps..." [Bird, History of a Line, 1899, p 32] A newspaper article from 1918 states that along the highway "...you will see some arrows pointing to the petrified forest." [Canon City Record, 1918 (month and day unknown)] About 1918, the Petrified Forest and Cripple Creek Touring Company offered tourists, "...easy riding Stanley Steamers from Colorado Springs to Cripple Creek via Petrified Forest..." It is unclear if this company was related to Coplen's enterprise, but their brochure states, "It [the petrified forest] is an exclusive property and cannot be exhibited by any other tourist conveyance.." [brochure and letters, FLFO archives, #1272-015 & 016] The company may have leased the property from Coplen.

Coplen bought out the surviving Association members in 1914, [Teller County Records, Book 158, p 287; Book 178, p 18] and began development of the Resort about 1922. ["Coplen Petrified Forest," brochure, 1922, copy in FLFO archives; Colorado Springs Gazette, 9/17/1922] He had stumps excavated, and moved the Colorado Midland railroad station from Florissant to his property.

"Coplen Digs Up New Wonders in Forest of Rocks - The discovery of several new wonders in the Coplen petrified forest, near Florissant, has been announced by J.D. Coplen, the owner of the forest... his force of workmen has uncovered 3 very large petrified stumps, one of them 16 feet in diameter at the top...

"Mr. Coplen has let the contract for moving the Midland railroad station, which he purchased last year..." [Colorado Springs Gazette, 7/30/22]

Palmer J. "Red" Singer and his wife, Agnes, purchased Coplen's ranch on March 17, 1927. [Teller County Records, Book 221, p 99] They operated the "Colorado Petrified Forest" for 46 years. Since "Red" had been a cowboy in southeastern Colorado as a young man, he also began the "Bronco Dude Ranch." The old railroad station became known as the Singer Lodge, complete with a massive fireplace made of petrified logs. Tourists were shown the Big Stump and taken to the Scudder pit to dig for fossils. In 1943 Singer acquired the nearby "Harry Place," and used the log house for his hired hands. (This building was the historic 1878 homestead of Adeline Hornbek, since restored by the Park Service.) When Singer died in 1954, Agnes and their son, Bob, ran the operation until the Park Service took over in 1973. [Kimmitt, pp 37-40] The lodge, almost 90 years old, was in poor condition. The Park Service had it removed in 1976. [Colorado Springs Gazette Telegraph, 4/18/1976]

"Without the stewardship of John D. Coplen, Palmer John Singer, his wife, children, and grandchildren, it is doubtful that any of the petrified wood specimens would remain there today. For unfortunately, there are many scavengers in our society who have a great compulsion to remove things of value and beauty from their natural habitat..." [Keith Singer in Kimmitt, p 40]

Less than a mile down the road was another Petrified Forest, this one known at various times as the "Colorado," "Henderson," "New", and "Pike" Petrified Forest. It was located by the stump called the "Trio," and, as of 1994, the Monument visitor center is located in one of their old buildings.

In letters to the Monument, Jessie A. Paylor states that David Henderson, her grandfather, moved to Colorado from Cassville, Missouri. He bought the land from Melinda Halthusen on March 6, 1920. [Teller County Records, Book 199, pp 417-18] Henderson began developing the tourist attraction in 1922 by excavating the stumps, and in 1924, built the "gateway" structure seen in their brochures. Jessie was a tour guide there for 4 years, starting in 1925. David died in 1936, and her father, Iva "Ivy" Henderson, took over. [Paylor, "letters," 10/29/90; 1/17/77] Her grandmother, Lorah, sold in 1950 to H.D. Miller. [Teller County Records, Book 255, p 585] The forest was operated by John Baker (who eventually bought out Miller) until 1961, when it closed down.

Investigators for the Park Service presented this picture of commercial operations at the petrified forests in the early 1950's.



"There are 2 private developments exploiting the fossil remains. The 2 tracts are adjacent to each other and their entrance gates are side by side. Each covers not to exceed 20 acres of larger holdings of the land owner. The development in each case consists of a road and trail system, petrified, in-place, excavated stumps, picnic grounds, a museum where fossilized material is displayed, and a quarry where the fossil bearing shales are exposed. At each area the admission charge is 50 cents (plus tax) per person. Each has indicated a desire to sell the property. Each during the past season has maintained ticket booths in Florissant and have used extensive roadside advertising...

"... For many years the 2 operators competed without friction. However, in the last few years the aggressive promotional activities on the part of one of the operators has become the source of considerable embarrassment to the nearby communities. Solicitation along the main thoroughfares, use of trick signs, high pressure activities, etc., have brought confusion, and resulted in complaints by visitors." [Rogers and Alberts, Florissant Fossil Shale Beds, Colorado, 1953, p 24]

Jessie Paylor recalls, "Singer, the owner, used to get out in the highway and solicit trade..." ["letter," 4/28/90] "Yes, Singer was quite a worry to my father. He'd say his stump was the largest. Well it really isn't." [Paylor, "letter," 10/29/90]

Agnes Singer remembers, "We always had competition from the Pike Forest and then, the last man that owned it... Baker came over and tried to keep the tourists from coming into our place...

"...he was spreading nails on the road and this guide (one of Singer's tour guides) brought his gun and shot him...

"...Of course he never forgave us and he closed the place up after a while..." [Singer, "Interview," 1976, pp 8-9]

\* \* \*

The record of efforts to set aside the fossil beds for national protection began in 1911. "As a result of work accomplished in the last few years ... by Prof. William Strieby [of Colorado College]... a movement is now on foot to have the government set aside the area comprised in the fossil deposits as a state or national park." [Denver Post, 8/14/1911]

In 1915 a story titled "Fossil Beds in West to be Guarded by the U.S." was printed in the Denver Times. It mentions Florissant, as well as several other sites, including the Green River shale basin of Wyoming and the dinosaur quarry near Vernal, Utah (which became Fossil Butte National Monument and Dinosaur National Monument).

The article notes that, "Colorado possesses one of the most unique and best known fossil fields in the world, near Florissant. Fossils are discovered here in such numbers that a railroad runs special trains to this field during the tourist season. One is afforded the novel spectacle of hundreds of men, women, and children diligently... digging in the ground, for the fossilized



remains of antediluvian creatures. This field has been studied by eminent scientists and has been pronounced as unique...

"Setting them aside prevents their... possible exploitation for gain..." [Denver Times, 10/12/1915]

According to National Park Service records, a compendium of which is in the FLFO legislative binder, the first notice given to the fossil beds by the NPS was in 1920. On August 12 director Stephen Mather wrote Edward E. Nichols of Manitou Springs that the fossil beds seemed worthy of national monument status, but an examination would have to be made.

That "examination" took place 12 years later, when superintendent Roger Toll of Yellowstone visited the area and submitted an adverse report dated November 21, 1932.

Russell Grater, assistant wildlife technician, made a "Preliminary Survey of Colorado Petrified Forest," May 7, 1937. No recommendations were made.

In a memorandum on December 17, 1941, H.E. Rothrock, acting chief naturalist, on reviewing available information, wrote, "...this area is worthy of consideration in connection with an integrated plan for reserving areas of geological interest."

Dr. Harry MacGinitie supplied the Park Service further technical information in a letter dated December 2, 1944.

In December of 1952, superintendent Edmund B. Rogers of Yellowstone and naturalist Edwin C. Alberts of Rocky Mountain National Park visited Florissant at the request of Secretary of the Interior Chapman. Despite recognizing the unique qualities of the fossil beds, their report, Florissant Fossil Shale Beds, Colorado, filed in January, 1953, recommended against national monument status.

"There is, then, no doubt of the national significance of the Florissant lake beds to scientists. It is a classic geologic area, and it will doubtless increase in importance as further collections are made in the future. The exposures are fairly widespread, nearly all the land is under control of ranchers and other resident citizens; collection is probably always made with permission of land owners. There appears to be little danger of the shales being gutted of their contents by casual visitors.

"The petrified tree stumps, however, although impressive in size and very interesting in relationship to the story of this Miocene [sic] Lake, are not in themselves of national significance. Being the means of livelihood of the private "Petrified Forest" operators, it is not likely that they will suffer unduly from vandals, and it can be anticipated that they will be available to students and scientific workers for generations to come. There is, then, no 'clear and present' danger of loss of these interesting scientific features to the public, as they are presently situated..." [Rogers and Alberts, 1953, p 14]

Clearly, they could not envision the tremendous social and economic changes of the '50s and '60s that would affect Florissant.

But it seems they made little effort to get a true picture of the problems that confronted the commercial operators. As a 1962 National Park Service report noted, "Even under the protection of the existing private developments, vandalism and promiscuous collecting of fossils continues..." [NPS, Florissant Fossil Beds National Monument - A Proposal, 1962, p 3]. Agnes Singer, owner of the Colorado Petrified Forest, said "Tourists began sneaking in under the fence and taking all they could carry. Palmer began wishing his land belonged to the government, or else, he said, 'There'd soon be nothing left.'" [West, p 30]. She told park ranger Henry Tanski in 1976, "... One reason Dad [Palmer] quit using it for a dude ranch, because people were just stealing the petrified wood all the time..." [Singer, 1976, p 3]

Geologist Richard Pearl expressed his concern that, "owing to cracks produced by weathering... the members of the trio and some of the other trunks are bound by iron cables. If suitable covering cannot be provided to protect them at least from the snow, it is only a matter of a relatively short while until they will be destroyed." [Pearl, "A Colorado Petrified Forest," The Mineralogist, April, 1953, p 149]

In 1959 Florissant was studied by Alberts and Knowles at the request of Park Service Advisory Board member Frank Masland. Their report recommended further investigations be carried out. Robinson and Knowles from the Midwest Regional Office visited the area in September of 1961. They sent their report, Florissant Fossil Beds National Monument - A Proposal, to the Washington Office in April of 1962 recommending the monument be established "as soon as possible."

"The rare quality of the Florissant site lies not in dramatic exposures of big-boned creatures, but rather in the delicacy with which thousands of insects, tree foliage, and other forms of life - completely absent or extremely rare in most paleontological sites of this period - have been preserved. The fossils at Florissant are individually quite small, but in the aggregate are tremendous. Few fossil sites in the world have yielded some 60,000 specimens of over 1000 different species of life. In addition to this vast number of individual fossil specimens, is the remarkable way in which the fine-grained ash has preserved, in minute detail, delicate features of the innumerable specimens sealed within the layers of shale." [NPS, 1962, p 7]

Agnes Singer wrote to Secretary of Interior Stewart Udall in July of 1961, offering her property to the Park Service. "Many of our thousands of visitors are amazed that the petrified trees and fossil beds have not been included in a national park... We are submitting it as a park site at a reasonable price and welcome your inspection at your convenience." [Singer, "Letter to S. Udall," 7/16/1961, in Singer file, FLFO]

In 1962 and '63 the Park Service contacted the 13 owners of

the land that comprised the proposed monument. Most indicated general approval. The Teller County commissioners also expressed their support.

The National Parks Association (now the National Parks and Conservation Association) supported the proposal. Elanor Gamer wrote in National Parks Magazine, "...Uncontrolled fossil quarrying and vandalism have destroyed much valuable surface material... but on the whole the [south arm of the] lake bed remains undisturbed... Only Florissant can provide the fine miniatures of the Tertiary which connect the larger remnants of the Mesozoic with the world today." [Gamer, July, 1965, p 19]

Now it was a matter of convincing Congress.

\* \* \*

The Park Service reported to the various members of the Colorado congressional delegation in 1963. Senator Gordon Allott responded favorably, but Representative Edgar Chenoweth, whose district included Florissant, initially thought the proposal too large. Eventually, however, he introduced H.R. 11834 in 1964 to establish a monument. Representative Frank Evans, who defeated Chenoweth, reintroduced the measure in 1965 and '67. Each time the bill failed, not from opposition, but apathy. Similar Senate bills met the same fate.

A Denver Post editorial complained in 1966 that, "...the area which once contained redwoods 350 feet high has waited many millions of years for recognition and apparently will have to wait some more.

"The area has suffered considerable abuse. Curiosity seekers have removed fossils. Giant redwood stump fossils have weathered considerably. Most recently a housing development has begun encroaching on the area...

"The project [the monument proposal] makes sense. There is public backing and enough landowners appear willing to sell to make the project thoroughly feasible.

"But it now appears that the Park Service personnel will have to...make a new study of the land acquisition and hope that Congress will buy the idea..." [Denver Post, 6/20/1966]

Representative Evans stated that he "...had received hundreds of expressions of public support from both organizations and the public at large. I have yet to see signs of opposition at all." [Evans, "Preserving Our Prehistoric Treasures," Parks and Recreation, July, 1968, p 3]

Another report prepared for the Senate attempted to explain the scientific importance of Florissant.

"The ancient lakebeds of Florissant preserve more species of terrestrial fossils than any other known site in the world. The insect fossils are of primary significance... They represent the



evolution and modernization of insects better than any other known site in America. In addition, the fossil plants, emphasized dramatically by the petrified tree stumps and the great variety of leaf fossils, adds greatly to the primary values.

"Fossils of spiders, other invertebrates, fish and birds have been found at Florissant... There is no known locality in the world where so many terrestrial species of one time have been preserved. A total of 144 plant entities or species have been found...

"Almost all fossil butterflies from the new world have come from this site." ["Report for the Senate Committee on Interior and Insular Affairs #91-263," 6/19/1969, pp 2-3, FLFO legislative binder]

But public support and scientific reasoning was not enough to force the issue. It took the threat of destruction to save the fossil beds.

\* \* \*

By the late 1960's the real estate market was growing in Colorado. The land encompassing the fossil beds was all privately owned and ripe for development. In spite of almost 10 years of effort by local supporters, the National Park Service, and various congressmen, there was still no movement on the proposed national monument.

Landowners began to express their frustration with the inaction. Agnes Singer wrote, "After almost 5 years of effort and little constructive progress in Congress on the National Monument proposal I am getting rather discouraged ." ["letter to Rocky Mountain Superintendant Granville Liles," 10/4/1965, in FLFO archives] "'We could have sold several times,' [Bob] Singer said in referring to the stalemate of property owners there waiting for the government to decide if they will buy the area." [Colorado Springs Free Press, 2/13/1969]

One concern of Congress was, as usual, cost. The plan to buy the 6,000 acres proposed by the NPS, and the creation of park services, a visitor center, etc., would exceed the funds available for allocation. In 1968 a bill for a 1,000 acre park, considered more "affordable," was passed in the House. However, park supporters felt that 1,000 acres was totally inadequate to fully protect the resources of the fossil beds. Their suggestion, as articulated by Dr. Ruth Weiner of the Colorado Open Space Coordinating Council; "...Include 6,000 acres in the National Monument now using available funds for land purchase and perhaps postponing development. A delay of opening the Monument, even a delay of several years, is much better than losing even part of the site." [Congressional Hearing, Colorado Springs, 5/29/1969, in the FLFO legislative binder]

Congressional apathy was the major concern of Estella Leopold and Betty Willard, leaders of the Defenders of Florissant. They had

to convince Congress of the need to act quickly to save the Fossil Beds. The main sponsor of Senate Bill S912, Gordon Allott, had never even seen the area. In May of 1968 they arranged for him to meet with them in Florissant. By showing him the wonderful fossils, they hoped to fire his enthusiasm for the proposed Monument. [Cripple Creek Gold Rush, 5/17/1968]

In 1969 Colorado Senators Allott and Peter Dominick introduced legislation for a 6,000 acre park. [Allott, "Hearing Before the Subcommittee on Parks and Recreation, 5/29/1968, p 4, FLFO legislative binder] A public hearing was scheduled for May, 1969, in Colorado Springs.

Not long after the meeting was scheduled, Central Enterprises Realtor of Colorado Springs, representing the Park Land Company, announced plans to build cabins south of Florissant. Included were 1800 acres within the proposed park boundary.

Environmental groups accused the company of land speculation at the expense of the government.

The developers countered with a press release explaining; "We have been negotiating for this property for almost two years and were not aware the U.S. Park Service was interested in a portion of this land until we had completed our purchase agreement."

They indicated that they would "cooperate with the National Park Service to maintain this land for a national park if possible. We have offered to sell this property to any holding company, society, foundation or individual at this time, to be held intact until legislature approves or disapproves the request to make this area a National Park."

"If the U.S. government does not act on this matter within 2 years, we want the option to repurchase this land at the same price we received it for."

In response to reports that Central Enterprises would double the selling price, they said, "We're not being unreasonable on the price we're asking."

... 'We cannot sit idly by for 6 months or more to see if legislature approves the request for the Florissant Fossil Bed. We must act...." [Colorado Springs Free Press, 7/4/1969],

Whatever their motivation, the company had set themselves up in a "no lose" situation. If Congress refused to act, they would have 1800 additional acres of homesites to sell. If an environmental organization wanted to buy the land to protect it, Central Enterprises would set the selling price. And if Congress established a park, company lawyers would be sure to get adequate compensation from the federal government, plus they could advertise their remaining acreage as being adjacent to a National Park, as these advertisements, run soon after the Monument was established, show:

"Teller County became home of the nation's newest Monument when the bill establishing the Florissant Fossil Beds National

Monument was signed... The beds lie only 2 miles from Colorado Mountain Estates... Remember when visiting your cabin site... to visit the Fossil Beds..." ["Mountain Views," Colorado Mountain Estates, fall, 1969, in FLFO files]

"Home sites available...in the hills and ridges immediately adjacent to...America's newest national shrine...the Florissant Fossil Beds National Monument." [Colorado Springs Sun, 4/25/1971]

Regardless of the outcome, the company would profit. But they saw no reason to delay construction. After all, Congress had put off action for several years.

Leopold and Willard realized that they had to take the initiative if they were to stop the developers. They mounted a media campaign to increase public awareness and support. And they decided to take their case to court.

\* \* \*

The hearing before the Subcommittee on Parks and Recreation of the Committee on Interior and Insular Affairs of the U.S. Senate took place on May 29, 1969, in Colorado Springs. Testimony was given by politicians, businesspersons, and scientists regarding the suitability of creating a park at Florissant. [FLFO legislative binder]

Sen Gordon Allott (CO): "Senator Dominick [CO] and I introduced a bill identical to the one before us in the 90th Congress. Unfortunately the committee's time was so heavily committed to... other pressing matters that action was not possible. Action was taken in the House of Representatives [90th Congress], but it is my sincere belief that the bill adopted by the other body was totally insufficient to grant the degree of protection these unique fossil beds deserve... The House bill authorized the acquisition of only 1,000 acres, but... the full 6,000 acres are essential to the proper management and preservation of this world renowned fossil treasure trove."

Letter to Sen. Dominick (CO) from T.W. TenEyck, director of Colorado Department of Natural Resources, 5/19/69: "I would like to solicit your assistance in the matter of the Florissant Fossil Beds National Monument designation. I have learned today there is a sales contract on a portion of the land proposed for inclusion in the Monument. Apparently, this particular owner, now quite elderly, has for many years been sympathetic toward the Monument effort, but has finally concluded that he'd better sell his land rather than waiting any longer. I don't know what you can do to accelerate the decision making in congress, but I would certainly urge you to do whatever you can."

Gregg Chancellor, representing Colorado Governor John Love: "In consideration of the scenic, historic, and economic value of



the Florissant Fossil Beds area, and in recognition of the present and imminent encroachments upon this area as well as the rising costs of land, the State of Colorado urges the designation of Florissant Fossil Beds at the earliest possible time."

Joe Burns, Chairperson, Teller County Board of Commissioners: "It is imperative that the fossil beds be put under the protection of the national park system. Any ranger... from Mesa Verde... or Petrified Forest... can tell you what happens when souvenir hunters fall upon valuable treasures... "

Richard Bradley, Colorado College; Board of Trustees, National Parks Association: "We have here a most unusual circumstance, perhaps without precedent in recent legislative history; namely, a proposal is being made to put a substantial piece of land under the protection of the National Park Service, and it stands virtually unopposed. Contrast this with the long, bitter battles that raged over the creation of a Redwoods National Park... If this bill fails to pass, it will not be because powerful lobbies were arrayed against it, but because Congress, deeply involved as it is with the weightier issues of the day... could not seem to find the time to consider it."

Dr. Harry MacGinitie, University of California, Berkeley: "...the fossil beds are widely known over the world for the wealth of fossil plants, insects and fishes which they contain. The combination of life forms, their abundance, and their beautiful preservation is unique...

"...at Florissant the biota of 38 million years ago... living in a moment of geologic time [are] preserved for us to see...

"...the land occupied by the lake beds is not of particularly great value, either for housing or agriculture, but as a page of earth history from the dim past it is priceless..."

Dr. Beatrice Willard, co-chairperson, Thorne Ecological Foundation: "Can we even contemplate hesitation at prompt, immediate approval... to create here a jewel in the National Park Service, while preserving intact one of the world's absolutely priceless scientific treasures? And yet, it has taken 48 years to reach this field hearing - the first National Park proposal was in 1921 - 17 years of formal proposals from the National Park Service, and four full congresses to get to this point."

Dr. Estella Leopold, University of Colorado; The Colorado Mountain Club: "Florissant plant fossils are perhaps the most noteworthy because they span the interval of 34 to 38 million years, and represent a tie point in an otherwise huge gap in the plant record of the region..."

"...how can man keep a perspective on his direction and life's path if he loses track of the routes that life has followed before him?"

Frederick Campbell, Kiwanis Club of the Rampart Range: "Private landowners don't wear black hats, but the economic facts of life force land development on the site that is now proposed for the monument. The landowners cannot hold land indefinitely while waiting for the Government to develop the natural wonders that are there... Over 15 years of previous study and discussion have preceded this field hearing. The testimony today reveals imminent, pending land sales, and all our club can say at this point is, gentlemen, now is the time to act."

Sen. Alan Bible of Nevada, the committee chairperson, summed up the meeting by saying; "This is one of the very few hearings that I have attended in the past 10 years where we didn't have violent opposition of some kind, and to go through a hearing without any opposition kind of makes me feel a little lonely..."

The only critical comment received by the subcommittee was from Robert and Agnes Singer, owners of the Colorado Petrified Forest. Although they were not averse to selling, their letter, dated June 11, 1969, indicates their concern that they would not be adequately compensated for their land by the government.

"I was not permitted to testify at the Colorado Springs, Co, hearing [This seems unlikely. As a property owner, Singer should have been able to testify.] and would like the testimony to be completed with addition of my statement.

"We as owners and operators of the Colorado Petrified Forest are not in agreement on the valuation of our properties. The Interior department's valuation on the commercial operation is less than the property cost over 40 years ago. I can assure you that a good market does exist in this area for any and all property that is available"

\* \* \*

On July 9 the Defenders of Florissant brought suit in Federal Court, seeking a restraining order to halt construction by the Park Land Company.

However, Judge Hatfield Chilson denied their motion, explaining that "...he personally sympathizes with the move to make the area a national monument, but said there is no law being violated in the developer's activities. He said he could not under law grant a restraining order.." [Colorado Springs Free Press, 7/10/1969] Chilson did set a hearing for July 29 on a request for a temporary injunction.

"Victor J. Yannacone Jr., attorney for the Environmental Defense Fund, Inc., [agreed] there is no legal precedent for such a restraining order, but added, 'If the bulldozers move, there is nothing to talk about...'" [Colorado Springs Free Press, 7/10/1969]

Undaunted, the next day Yannacone and attorney Richard Lamm (the future Colorado governor) rushed to the U.S. Court of Appeals.

"The appeal was argued before a 3 judge panel headed by Judge Jean S. Breitenstein. 'But what statute does this excavation violate?' Judge Breitenstein asked. "'Your Honor,' the plaintiff's lawyer, Victor Yannacone, replied, 'there is no direct statutory protection for fossils.' Breitenstein continued, 'What right have we to control the use of private land unless there's a nuisance perpetrated by the owners?' Yannacone answered, 'Your Honor, if someone had found the original U.S. Constitution buried on his land, and wanted to use it to mop up a stain on the floor, is there any doubt in the mind of this court that they could be prevented?'

"That day the court granted a restraining order." [Sax, Defending the Environment, 1971, p 208]

By issuing the order, the court acknowledged that at Florissant the public had an interest in the land that justified interfering with private property rights. Environmental journalist Joseph Sax called it, "...one of the most extraordinary lawsuits yet to arise in the area of environmental litigation." [Sax, p 206]

"The order was granted following the earlier refusal of U.S. District Court Judge Hatfield Chilson to issue such a restraining order.

"...court action temporarily will prevent the Park Land Co. from ... building roads on some 1,800 acres of the 6,000 acre fossil areas.

"The restraining order will be in effect until July 29, the date on which Judge Chilson has set a hearing on the dispute..." [Colorado Springs Free Press, 7/11/1969]

A few days later the developers fought back. They "...filed a motion to dissolve a temporary restraining order granted last week by the 10th Circuit Court of Appeals..."

"Robert Johnson... attorney for the Park Land Company... asked that the high court order be dissolved on the grounds it violates 'substantial and fundamental constitutionally guaranteed property rights.'" [Colorado Springs Free Press, 7/16/1969]

In spite of their temporary victory, the Defenders of Florissant were still concerned. The restraining order would expire at the beginning of August, with no guarantee it would be renewed. The bill had been approved in the Senate, but action in the House was moving at a glacial pace. As the deadline approached, one of the Defenders, conservationist Vim Crane, decided to act.

She contacted Representative Evans "...and told him that she and her neighbors, including children, were going to block the bulldozers unless he took action.

"'Then I thought of the enormity of what I volunteered for. I went right out and had my hair fixed, put on my pearls and high heels... I thought no self respecting bulldozer driver would run over a woman in pearls and high heels....'" [Ute Pass Courier, 8/24/1989]



Fortunately, Crane and her friends never had to carry out their threat. The image of bulldozers poised to move, finally got Congress to move.

On August 4, Representative Donald Brotzman of Colorado presented this picture to his colleagues:

"... even though this priceless window into the Oligocene period has lain undisturbed for 34 million years now, its destruction could come this very afternoon.

"Early in July a coalition of citizen groups, fighting to preserve Florissant, won a temporary restraining order against a major Colorado Springs developer, which plans to build A-frame vacation cabins on the site, prompting the remark [from Yannacone] '...to build A-frames on this singular, national resource would be like wrapping fish in the Dead Sea Scrolls.' That order has expired and the builder has announced plans to bulldoze his access road through the fossil beds today.

"...I would urge my colleagues to take this opportunity to prevent the destruction of a national treasure. Preserving the Florissant today will be relatively easy, but even 24 hours from now it may be futile." [House Congressional Record, 8/4/1969, p H6806, in the FLFO legislative binder]

Colorado Representative Frank Evans added, "A developer's contract of purchase is on record in this county... As a result of uncertainties as to the course to be taken by the developers, as to whether they would stay action until Congress could work its will, interested people then filed an action... and it is now before the U.S. Circuit Court for a temporary restraining order...

"We came before the Congress last time thinking that this was about to happen, and this year it has happened. Unless the Congress acts this year, and acts quickly, to retain this valuable area, it will be too late." [House Congressional Record, 8/4/1969, p H6807, in the FLFO legislative binder]

The House finally approved the bill on August 4. After amendments were approved by the Senate on August 7, and final details completed, it was flown to California and signed by President Nixon on August 20. [Colorado Springs Free Press, 8/19/1969; 8/23/1969]

But this had been no battle of bitterly opposed factions, such as with Redwoods National Park. The developers really couldn't lose, and they put up very little resistance to the Monument proposal. In fact, Rocky Mountain National Park Superintendent Theodore Thompson wrote to the Midwest Regional Director ["Memo," 7/11/1969, FLFO files] that, at the court hearing on July 9, one of the owners of the Park Land Company indicated that he would be willing to wait on road construction until July 14 so that the Defenders of Florissant could investigate acquiring funds to purchase the land. In the end, pressure by the developers may have

been the deciding factor in forcing Congress to act. Nevertheless, the threat was certainly real. If the supporters of the fossil beds had not spent years convincing the Federal Government to preserve this irreplaceable resource, a housing development would surely have been the fate of the fossil beds.

The creation of Florissant Fossil Beds National Monument succeeded because it was supported not only by groups such as the Sierra Club, Wilderness Society, Colorado Mountain Club, Audubon Society, the National Parks Association, various museums and universities, but also local, county and state governments, major newspapers, and the Chambers of Commerce of Woodland Park, Colorado Springs, and Denver. Some of the land owners had mixed feelings about selling their property but, neither they, nor the developers presented any serious opposition to the Monument proposal.

\* \* \*

After 10 years the supporters of Florissant could celebrate the creation of a new National Monument. Now it would be the job of the National Park Service to transform their dream into reality. The government did not own the land. The many financial and legal proceedings to acquire all of it would take over 5 years. The first step, however, was to establish a ranger presence at Florissant. Theodore Thompson, Superintendent of Rocky Mountain National Park, was given authority over the area. Under his direction, in 1970, a small trailer was installed by the Maytag barn, across the road from the old Pike Petrified Forest road. It would function as an office and "visitor center," although the park was not yet "open."

Seasonal William Ryan, the first ranger at the Fossil Beds, worked from June through August of 1970. Local resident James "Slim" Ghist, was hired as a temporary maintenance worker to maintain the park's modest "facilities" and clean up areas as they were acquired by the government. [Shillinglaw, "A Personal Record," 1970]

In September, 1970, seasonal ranger Richard Shillinglaw was transferred from Rocky Mountain National Park for 2 months. It was his job to meet park neighbors, post boundary signs, perform poaching patrols, and explain the status of the monument to visitors. [Shillinglaw]

Shillinglaw kept a journal, which gives us a picture of the earliest days at Florissant.

9/14/1970 - "The prospect of being associated with this new national park is exciting..."

"This new assignment, although it may be a brief one, I regard as not only an adventure, but also as a challenge. I hope... that I will be able to get along with the 'neighbors' down there.

9/17 - "My first view of Florissant today... the Florissant 'visitor center' is a... government trailer on the east side of the county road near a barn and windmill and just south of the entrance to the Baker property..."

9/18 - "It is beautiful country with rolling hills, many meadows... lots of ponderosa pine and aspen... One can see Pikes

Peak from several higher places.

9/19 - "Our visitors are nearly all interested in when the development of the area is going to occur. Some are interested in collecting fossils.

9/20 - "Mr. [Robert] Singer took me to the great sequoia redwood stump... Later [he] gave me a renewal supply of his publicity folder which we have been handing out at the... visitor center trailer. Mr. Singer made quite an impression on me. I think he truly loves the country hereabouts. He seems to know a great deal about geology, minerals, fossils... Surprisingly, one of Mr. Singer's worries, or regrets, is that when the government takes over, it may tear down the fireplace [in the lodge]. One can't help but feel a sense of melancholy about these people leaving the land upon which they have lived for so long. The extent and depth of these sentiments cannot, of course, be measured scientifically. Does the government have emotions or sentiments? I suppose it does, if the employees do. Lets hope we can be as empathetic with these people as possible - and show it.

9/24 - "Slim and I spent the middle of the day by posting the south and west boundary with NPS boundary and 'Warning - No Hunting or Trapping' signs.

9/25 - "Because I was in uniform, I made several contacts with people here... [in Colorado Springs]. They seem to have a respect for the rangers and I got the feeling that they generally appreciate the things we do... I must say how surprised I have been to discover how interesting fossils are to not only our Florissant visitors but also the people I talked with on the street today.

9/28 - "...Slim and I rode horses to wrangle some cattle out of the monument... Slim is obviously fully at home on a horse's back. It seems like an experienced horseman is more influenced by the force of gravity than I am... You can always see... sky between me and the horse.

9/29 - "I had coffee with Clarence 'Gus' Carlson, Teller County Sheriff. I offered him our assistance whenever he might need it. In turn I asked him to appoint me as a deputy sheriff. We went to the old brick county jail... I took the oath to defend the constitutions of the U.S. and Colorado and was given a deputy sheriff's card.

10/11 - "We have installed a master index system for recording incident reports and unusual public contacts. Since September 17 we have filed one incident, #001, pertaining to the vandalism of Jack Baker's front gate. I wonder what the file will contain by October 11, 2000 AD...

"The moon is full - the weather beautiful. I listened to the owl and the coyotes; I thought how fortunate I am to have good health and be able to be out on such a night.

10/18 - "Another early morning hunting patrol and I made my first contact with a hunter in the monument. He said he hadn't seen any signs even though he was... parked adjacent to a sign.

10/24 - "An early morning patrol started the day with no extraordinary events. It did give me the melancholy thought that my tour of duty here will soon be finished. The time has gone too



fast.

11/15 - "At 0600 I encountered a deer 'spotlighter' in the monument, but he got away..."

"Had another interesting conversation with Mr. Nate Snare [grandnephew of David Long], whom I met while on patrol... Nate is a real student of husbandry. He knows not only all of the grasses and plants on his land, but also their Latin names, and can say them with true classic pronunciation. He said that in the past the farmers who used this land... let it wash away... It has taken some of these fields 40 years to recover, said Snare."

On his last day, November 19, Shillinglaw made a final "...tour of the Monument," before heading home to Iowa. [Shillinglaw]

In his journal, Shillinglaw wrote, "Perhaps someday someone will be interested in the early days of Florissant Fossil Beds National Monument..." and he was right. We are indebted to him for preserving his thoughts and adventures.

In May of 1971, the Cripple Creek Gold Rush reported that the park would be closed for the year, but the Park Service hoped that it might open for "limited use" in 1972. The Colorado Petrified Forest was open for business as usual in 1971 [Cripple Creek Gold Rush, 5/21/1971] and, for the last time, in 1972. [Singer file, FLFO]

In June of 1971 Victor Lewis became the Fossil Beds' first manager [1971-1975], [Ute Pass Courier, 6/10/1971] and, a year later, he was designated Superintendent. With only one ranger and one maintenance worker to assist him, Lewis not only managed the Monument, but greeted visitors and gave interpretive talks. [Denver Post, 5/17/1972; Colorado Springs Gazette Telegraph, 8/20/1973] He led the Monument through its difficult early period of acquiring land, developing a real visitor center, and establishing interpretive programs for visitors.

In 1972 the Monument was opened for limited use. The visitor center was still a trailer by the red barn, but there was now a self-guided nature trail, in the area where the Sawmill trail crosses the A-Frame service road.

By the end of 1972, the government had acquired about 4200 of the 6000 acres authorized by Congress. [Denver Post, 11/19/1972] 2 critical pieces still to be obtained were the Colorado Petrified Forest and Baker's Pike Petrified Forest. Price negotiations with the Singer family were completed in the summer of 1973 and in August, the park took possession of the Colorado Petrified Forest. [Singer file, FLFO]

Buying land from the eccentric John Baker proved to be more difficult. The Park Service hoped to obtain Baker's property in 1974, because they wanted to renovate one of his buildings to use as the park visitor center by the spring of 1975. [Baker file, FLFO] This timetable, and the park resources themselves, were suddenly threatened in the summer of 1974.

As acting Secretary of Interior Nathaniel Reed explained; "...A complaint in condemnation was filed on this tract in 1970, with trial eventually set for July 29, 1974. However, only about 3 or 4 days before trial was due to begin, the judge unexpectedly postponed trial indefinitely. Immediately after postponement of the trial, the Bakers brought in a front-end loader and started digging holes in varying depths, shapes, and sizes throughout their property. The purpose of this digging, we presume, is to determine the extent of the paleontological resources to enable the Bakers to better prepare themselves for trial. We believe that this destruction of the property could continue until all the paleontological resources have been destroyed for both scientific purposes and for the benefit of the general public.

"... a pattern of systematic search, excavation, and removal of the fossil remains within the property is suggested. It seems likely that if title to the property does not pass to the U.S. within a relatively short period, that further excavations can be expected with concomitant degradation, damage, and destruction of the paleontological remains." ["Letter to Senator H. Jackson, Committee on Interior and Insular Affairs," 7/5/1974, in Baker file, FLFO]

Here was a threat to the fossil beds almost as serious as the 1969 real estate development. The Park Service immediately filed suit to take possession of the land as soon as possible. A federal court order giving title to the U.S. was issued on November 5, 1974, and The Park Service took physical control on November 7. ["Memo to RMRO Director from FLFO Superintendent," 11/27/1974, in Baker file, FLFO]

Now that the Park Service owned the land, they proceeded with their development plans. The site was cleaned up and the Baker building renovated. [Letter in Baker file, 5/15/1975, FLFO; Colorado Springs Gazette Telegraph, 1/7/1976] The new visitor center featured a fossil display from the collection of Dr. Paul Stewart of Waynesburg College, Pennsylvania. [Colorado Springs Gazette Telegraph, 7/7/1975] A new picnic area and nature trail were also opened. The official dedication of the new facilities took place August 9, 1975.

Visitation had grown from 9,000 in 1972 [Colorado Springs Gazette Telegraph, 7/7/1975] to 40,000 in 1975. [Colorado Springs Gazette Telegraph, 1/7/1976]

On September 1, 1975, Jack R. Williams became the second Superintendent [1975-1980] of Florissant Fossil Beds National Monument. [Colorado Springs Gazette Telegraph, 9/5/1975] He would be responsible for guiding the continuing development of the park.

One of his first problems was what to do with the Singer Lodge. The Park Service had chosen the Baker building as a visitor center over the Lodge because the cost of renovation was much less. [Baker file, FLFO] The park could not afford to move or restore the Singer building. After requesting public input on what to do, [Ute Pass Courier, 10/8/1975] the decision was made to have it dismantled. [Colorado Springs Gazette Telegraph, 4/18/1976]



Another, more enjoyable project was the restoration of the Hornbek Homestead. At the time it was called the "Harry Place," for the family that sold it to the Singers in 1943. It had been used as a bunk house by Singer's employees, and, by 1975, was in desperate need of repair. The Park Service knew only that it was supposed to be an 1870's homestead. As plans for restoration were implemented, rangers investigated the history of the cabin. They found that it had been built in 1878 by Adeline Hornbek, a single mother with 4 children. She gained title to the land by homesteading, as prescribed by the Homestead Act of 1862, which gave women, as well as men, access to land ownership in the west. Her prosperous homestead epitomized the skills and ambition of American pioneer women. It was opened for visitation in 1976. [Colorado Springs Gazette Telegraph, 5/22/1976; 11/26/1976]

Robert Reyes [1980-1983] became Superintendent in 1980, when park visitation had increased to 66,000. His main challenge was to write and implement the Monument's General Management Plan (GMP). This document, created with public input, established the management policies that the Monument would follow in the years to come. [Colorado Springs Sun, 7/12/1981]

From 1983 to 1985, Roger Martin served as Florissant's Superintendent.

In 1986 a Florissant contractor planned to locate a county landfill adjacent to the northwest corner of the Monument. This action would have had serious aesthetic and environmental consequences for the park. Superintendent Tom Wylie [1985-1988] announced that the Park Service had filed suit in state court to block approval of the dump site. This pressure caused the contractor to withdraw his proposal. [Colorado Springs Sun, 2/12/1986; Colorado Springs Gazette Telegraph, 2/11/1986]

Florissant Fossil Beds National Monument continues to face the challenges of protecting the natural resources and providing improved visitor services and facilities. Designs were drawn up for temporary shelters to protect the fragile Sequoia stumps. These plans, supported by Superintendent Noel Poe [1988-1990], and Superintendent Dale Ditmanson [1991-1995], and the Friends of Florissant Fossil Beds organization, were finally realized in 1996 under Superintendent Jean Rodeck [1995-].

25 years ago Florissant Fossil Beds National Monument was just a dream in the minds of some dedicated citizens. The Monument as it is today fulfills much of that dream.

\* \* \*

#### Who first settled near the Big Stump?

There is some historical confusion as to the first settler to live in the petrified forest. F.M. Brown claims that Adam Hill moved there in 1868 or '69, found the stump and the fossils, and probably showed Theodore Mead where to dig in 1871. [Brown, "Interview," 1989, p 54; "letter," 3/18/1981; "letter," 12/14/1989]

However, a copy of a "Pre-emption Proof" signed by Hill, for



the land by the Big Stump, [FLFO archives #1272-065] proves that he did not occupy the land until 1874, and that he bought it from Frank Sens (Hill spells it Sence), David Long's brother-in-law.

Excerpt from Pre-emption Proof for NW4, NW4, SW4 of SEC 13, and NE4, SE4 of SEC 14, T 13S, R 71 W, for Adam G. Hill, dated August 25, 1880.

\* When did you make settlement on the land and what constituted your first act of settlement?

"In the fall of 1874 I built a [unreadable] house and put fencing on it."

\* What improvements, if any, were on the land at the date of your settlement? (If any, state who owned them and whether they now belong to you.)

"There was some fencing and the shell of a house. They were owned by Frank Sence [sic]. I purchased them from him."

\*When did you first establish your residence upon the land?

"In December 1874.

Witnessed by James W. Coplen

[Note: The witness, James W. Coplen, is NOT the man who later bought the petrified forest. That was John D. Coplen. It is possible the two are related. They may also be related to Hill's wife, Charolette Coplen.]

The confusion is further compounded by the memoirs of David Long's daughter, Atlanta Georgia "Attie" Long Thompson, who gives 2 different dates for their arrival at the petrified forest. The events she described took place about 60 years before, when she had been 8 years old.

In 1934 she states; "Father had come to Colorado in the summer of 1870... and lived in Colorado City until May, 1871. Hearing of the wonderful... country west of Pikes Peak, he... started for Florissant." ["Our Home in the Petrified Forest," The Colorado Magazine, May, 1934, p 101]

In 1935 she wrote in Daughter of a Pioneer; "In the spring of 1871, we moved up on the divide near a place now known as Monument..." [p 9] "In the spring of 1872 he moved us to the mountains... settling on a piece of ground that had a petrified forest on it..." [p 14]

Florissant rancher Nate Snare told a reporter, "My mother's uncle [David Long] came out... and squatted on the Singer Forest in 1872." [West, p 30]

But Rex Stevens, grandson of David Long, wrote a letter to the "Colorado Prospector" in 1974 saying that Long moved into the petrified forest in 1871. [Colorado Prospector, V. 5, #5, May, 1974, p 8] And a letter written by Chester Allen, a childhood friend of Attie Long, claimed that David Long arrived in 1871. [letter in possession of Celinda Kaelin]

Who showed Theodore Mead the fossil area near the big stump in the late summer of 1871? Not Adam Hill. He didn't move there until 1874. Was David Long there, or did he arrive in 1872? Undoubtedly Mead stopped at Castello's store, but Castello would not have shown

Mead where to dig without introducing him to the landowner. And who is Mr. Bradshaw, mentioned in the newspaper, Out West, June 13, 1872, as having "a squatter's claim on a portion of the forest"? Was he there when Mead arrived? These questions may never be answered.

\* \* \*

### The Story of the Big Stump

Another unresolved mystery of Florissant is the fate of the Big Stump. Set at the base of a large hill, it is one of the best preserved stumps because the completeness of the petrification process makes it much harder than most of the others. It was supposedly uncovered around 1871. [Brown, 1989, p 54]

There are many reports over the years of large stumps being sent east for exhibition at museums and fairs. Certainly, someone tried to cut up the Big Stump for shipment, as attested by the saw blades still stuck in the rock. Most reports say this was done for the Columbian Exposition in Chicago in 1893. But references to the cutting of the stump appear as early as 1884. It is also rumored that the stump was at one time over 40 feet tall, and that a portion of it was cut down and shipped to Chicago. But the Colorado Springs Gazette, 4/26/1884, describes it as being 10 feet tall when the cutting began. What seems possible, however, is that a portion of the tree, naturally on the ground, might have been removed at some time.

Unfortunately, no copies exist of the pamphlet describing the exhibits in the Colorado Pavillion at the Columbian Exposition, [information from Chicago Public Library] so we may never know if any Florissant stumps were displayed.

The following are various accounts relating to the Big Stump and the shipment of fossil trees from Florissant:

"On the ranch of Adam Hill at the east end of South Park are the remains of what was at some day, so far back in time as to be lost in the shadows of antiquity, a redwood grove, now only a shattered collection of petrified stumps... These stumps are very large in circumference and about 20 in number... Mr. Hill is now in correspondence with parties in Philadelphia for the transportation of this primeval forest to the centennial exhibition." [Colorado Springs Gazette, 4/8/1876]

"The petrified stumps near Florissant post office, which form one of the great natural wonders of the Rocky Mountains, are subject to the hands of the vandal. A company has purchased for the sum of \$7,000, the ranch upon which these great natural curiosities rest and is about to remove one or more of them... The stumps... will be shipped to some city museum and set up for admiration of thousands who might never see them in their native fastnesses. This is the only excuse that can be offered for marring the works of nature, and perhaps that excuse is ample." [Fairplay Flume,

8/16/1883]

"There is one stump, fully petrified, well worthy of a long trip to see it. It is ten feet high and forty-five feet in circumference. Near it is an engine brought thither to work the saws with which to cut it off, and there are five of the saws used for that purpose, now embedded in the stump. Some Denver parties wanted the stump for exhibition, and to get it were compelled to purchase the ranch on which it was, belonging to Adam Hill. It is said they paid \$3,000 for 160 acres, and that he retains an interest in the exhibition receipts of the stump. For some reason these parties have abandoned the task of sawing it down." [Colorado Springs Gazette, 4/26/1884]

"But the principle attraction to strangers in the vicinity of Florissant so far has been the great fossil beds... Here are found petrified stumps... and woods of all shapes and sizes... Whole stumps of agate have been broken up and carried away by specimen hunters. One of the largest of these petrifications stands about one and one half miles south of the town... Relic hunters have greatly reduced its size and appearance... The stump is now about 12 or 14 feet high and 14 feet in diameter and is clearly of the California redwood variety, although there is nothing of that species known to grow in that region now..." [Colorado Springs Gazette, 1/1/1889]

"A Remarkable Stump... one of the most remarkable results of natural forces in Colorado, if not the world..."

"...It is the largest of many around here... and is petrified. It stands about 15 feet high and is 45 feet in circumference. Its bark is from 12 to 14 inches thick, portions of which may be seen lying near it... It may be said to belong to the progenitors of the sequoia of the present day. It flourished in the Tertiary period, which was the world's great tropical summer... the little shoot which grew into this great tree first budded about 400,000 years ago [sic].

"...it is hard to grasp the fact that we must look across the gulf of these almost numberless years to see this mighty trunk in its perfect majesty..." [Colorado Springs Gazette, 4/12/1890]

"Only one of the stumps as yet has been entirely uncovered, and to this most of the visitors go first. It is on the edge of a small grove of pine on the west side of the valley. Over it is a rough scaffolding from which are suspended several saws still deeply imbedded in the stump several years ago. When the Midland was first opened, someone conceived the idea of transplanting the stump to Manitou, but it was found that it could not pass through the tunnels of the road. He then commenced to saw it into vertical slabs, which he thought could be put together afterward. The saws sank easily into the top of the stump for about two feet, when they encountered hard silica to which the outside air had not yet penetrated, and there they stuck..." [Colorado Springs Gazette, 6/24/1890]



"The last remnant of the so-called petrified forest one and one half miles south of Florissant is about to be taken to Chicago.

The oldest settlers thereabouts remember that 20 years ago there were 20 of these petrified trunks standing erect besides numerous petrified logs lying over the ground. All have been removed by tourists and relic hunters until now one of the greatest and rarest natural curiosities of the world has been despoiled. The trunks and logs have been sawed up and broken to pieces and taken East...

The remaining trunk would have been taken long ago, but for the great expense of the project... The cost of its removal will be heavy and the company expects to reimburse themselves and make something by placing it on exhibition at Chicago." [The Creede Candle, 2/10/1893]

"My purpose for visiting the Florissant Basin during the past summer was... inspecting the debris of the wonderful forest which ages ago had undergone its transmutation into stone...

"The remains are fairly numerous, but what strikes one with special astonishment is the giant size which some of them attain... In most instances the stumps hardly rise above the surface, coming up flush with it... The "king of the forest"... has been laid bare to its roots. The stump stands 15 feet high, and at that distance above the roots it measures 45 feet in girth... Imbedded hard within the trunk, and held by it fast as in a vise, are the blades of 2 gang saws, the wreck of a barbaric effort to section the tree and remove it in parts to the World Columbian Exposition. It is stated that this effort at desecration was only abandoned after it had involved the expenditure of some 3,000 to 4,000 dollars.

"...only a short time back, a prostrate, shattered trunk was measured over a length of about 150 feet..." [Heilprin, "The Stone Forest at Florissant," Popular Science Monthly, August, 1896, pp 480, 483-84]

"In former years many of these [fossil trees] stood up several feet above the level meadow, but they have been mostly razed to the ground by visitors... One monster, however, remains standing up from the excavation about its roots for 12 feet... This, too, would have been broken up and carted away, for the stone saws that attempted to cut it in sections still remain sticking in the tree. At a glance, anyone familiar with the great redwoods, or Sequoias, of California, recognizes in the perfectly preserved bark and grain of the wood that it belongs to the celebrated Big Tree family, although a long way from the living types on the Pacific coast. [Lakes, 1899, p 179]

"Chief among the geological attractions is the "petrified forest," which consists of 2 farms dotted with petrified stumps of trees... The chief attraction among the petrifications is found on 'petrified stump farm' a mile and a half from the station. It is the 'Big Stump'... As it stands now it is 19 feet high..." [Bird, History of a Line, 1899, p 32]

"That trees as large, if not larger, than the monarchs of the forest of California grew in Colorado during its prehistoric days is apparently proven by an interesting discovery by 2 men near Florissant. It is a semi-petrified tree stump measuring a little over 30 feet in diameter. One of the discoverers, Dudley Grey, has called the attention of the Commissioner in Chief Thatcher of the St. Louis Exposition to the phenomena, and it is his intention to send the tree to the Louisiana Purchase Exposition..." [Unknown Denver newspaper, 3/20/1902, in Dawson scrapbook, V. 50, p 211, Colorado Historical Society Library]

"Several years ago an effort was made to cut the largest stump into 3 or 4 sections for transportation and exhibition, but the attempt met with failure, and portions of the broken saws still remain in the stump..." [Henderson, June, 1906, p 147].

"One of the most interesting specimens is the petrified stump of a Sequoia...This tree is 21 feet in diameter, somewhat above its spreading base. It is perhaps 7 feet in height, and is said to be the finest specimen of petrification in the world. About the time of the Chicago Exposition an attempt was made to saw this stump in two, and take it to the fair. But it is so very hard, that they failed to get it cut in two, and parts of the saws still remain in the stump. There is a theory that this forest is older than the Rocky Mountains..." [Canon City Record, 1918, month and day unknown, in Dawson Scrapbook, V. 76, p 31, Colorado Historical Society Library}

"A fossilized Sequoia stump of gigantic size stands as a strange, supreme monument over this primeval Pompeii..."

"On an early camping trip, I found a number of men... trying to cut down the matchless redwood stone stump. This barkless giant tree trunk was 15 feet in diameter. Judged by existing sequoias, which it closely resembles, it must, when alive, have been not less than 300 feet high, its age 2000 years or less..."

"Nor has man cut it down. After days of effort, this stump was left standing, and the stuck steel saw is rusting in its side. It may outlast Pikes Peak." [Mills, Romance of Geology, 1926, pp 88, 97-98]

"One Sequoia stump, the largest thus far uncovered in the area, is over 75 feet in circumference and stands about 15 feet high. From reports this tree was, when first discovered, approximately forty feet tall, but lost about twenty-five feet of its length when attempts were made to take part of it to the first Chicago Worlds Fair." [Grater, NPS "Preliminary Survey of Colorado Petrified Forest," May 7, 1937]

"In 1892, an attempt was made to split the tree in 4 sections to facilitate shipment to the Chicago World's Fair. The toothless saws broke, but not until 40 feet had been cut off." "Your Souvenir Forest Guide of the Colorado Petrified Forest," date unknown, p 3,

brochure in FLFO files]

" ...It was not until 1874 that this storehouse of history was uncovered to the eyes of man. At that time a Ute indian had described a gigantic white tree to a government geologist [who] stumbled on the find after a search through the area." [Colorado Springs Gazette Telegraph, 5/21/1961]

"The petrified stumps are impressive to all who see them because of their considerable bulk and silent, mysterious presence. These giant stumps - buried and preserved by volcanic ash mudflows - are very striking examples of fossilization... Preserved exactly where they were... growing, they approach the ideal of a 'petrified forest' more than do the great prostrate logs of Petrified Forest National Monument in Arizona." [U.S. Representative John Kyl (Iowa), House Congressional Record, 8/4/1969, p H6804, in the FLFO legislative binder]

" ...the world's largest petrified tree stump, which is 74 feet in circumference, stands 14 feet high, and weighs 40 tons. The tree dwindled because tourist couldn't resist chipping away the petrified wood for souvenirs and thus destroyed many large examples of this phenomenon.

In 1892, an attempt was made to split the tree in four sections to ship it to the Chicago World's Fair. The steel bands used in this work can still be seen today. Workers managed only to remove the upper half, a piece about 40 feet in length. No one knows where this part is today." [Colorado Springs Gazette Telegraph, 5/20/1973]

"When first discovered by the Ute Indians many years ago it [the Big Stump] was 75 feet tall, pure white in its petrified state, and was soon worshipped by the tribe." [Colorado Springs Gazette Telegraph, 5/26/1974]

There is no evidence that the Big Stump was ever any taller than it is today. But we do know that all of the Florissant stumps were vandalized. As chronicled by early visitors, standing portions were removed, as well as logs and fragments from the ground. The stumps probably did not exceed 6 feet above the ground, if that, and they certainly were not 40 to 60 feet tall. Stories exaggerating the size of the stumps found in modern newspapers and magazines should be interpreted as folklore. However, the wanton destruction of this wondrous "forest" is a fact, and we can only be thankful to those who worked so hard to protect what remains.



CHRONOLOGY OF SOME EVENTS LEADING UP TO THE  
CREATION OF FLORISSANT FOSSIL BEDS N.M.

In a letter dated August 12, 1920 to Edward Nichols of Manitou, Colorado, Director Stephen Mather stated Florissant was worthy of national monument status, but an examination would be required.

An adverse report dated November 5, 1932 was submitted by Roger Toll, Superintendent of Yellowstone to Director Albright concerning the proposed Florissant Fossil Beds N.M. The report was approved by Albright, November 21, 1932. It was reviewed by "J.L.B." and recommended for disapproval on December 15, 1934.

A report dated May 7, 1937, was submitted by Russell K Grater, asst. wildlife technician, titled "Preliminary Survey of Colorado Petrified Forest." Grater wrote "Scientifically this petrified forest ranks very high and it is my belief that steps should be taken to protect these splendid fossil remains... Difficulty is being experienced by the present owners in keeping the visitors from breaking up these giant stumps and logs as souvenirs... If possible, its aquisition and protection would be very worthwhile."

In a memorandum dated December 17, 1941, H.E. Rothrock, acting chief naturalist, stated, "this area is worthy of consideration in connection with an integrated plan for reserving areas of geologic interest."

At the request of Dr. R.W. Chaney, Dr. H. MacGinitie of Humbolt College, California, provided the Park Service with additional technical information about the Florissant Fossil Beds in a letter dated December 2, 1944.

On December 11 and 12, 1952, Superintendent Edmund B. Rogers of Yellowstone and naturalist Edwin C. Alberts of Rocky Mountain investigated Florissant due to a request by Secretary of Interior Chapman, dated August 29, 1952. Their report, Florissant Fossil Shale Beds, Colorado, dated January, 1953, did not recommend monument status because; "All the lands involved are in private ownership and there is no indication they could be acquired... except with an unwarranted outlay of federal funds. ...while this [fossil forest] is about average interest, it does not appear to warrant its purchase. There is no clear an present danger to the fossil shales because they are so extensive and there are few obvious exposures. The fossil stumps... are available to the public under private ownership."

Memorandum dated December 29, 1958, was sent from WASO to Region 2 requesting a study of the Florissant site because of interest by Advisory Board member Frank Masland.

On February 12, 1959, regional representatives Alberts and Knowles and personnel from the USGS visited Florissant. A report dated April 14, 1959, was sent to WASO. Recommendations was made

for additional study to determine various suitability and feasibility aspects.

On September 26 and 27, 1961, regional representatives Robinson and Knowles visited Florissant.

On April 9, 1962, the regional report, "Florissant Fossil Beds National Monument - a Proposal," was sent to WASO. It recommended a 5,500 acre monument.

In May, 1962, the Advisory Board recommended to the Secretary of Interior That Florissant be established as a national monument.

On October 18, 1962, copies of the monument proposal were sent to the Colorado congressional delegation by Assistant Secretary Carver.

Regional representative C. Brown delivered 2 copies of the proposal with Colorado Governor McNichols' office on October 22, 1962.

On October 26, 1962, regional representative Knowles and WODC representatives Benson and O'Shea visited Florissant.

On November 1, 1962, CO Senator Gordon Allott wrote to Secretary of Interior Udall requesting the landowners reaction to the national monument proposal.

Between November, 1962, and March, 1963, all 13 landowners involved were contacted either in person or by mail by NPS personnel. 12 indicated general approval of the project. One in Kansas wanted to be visited personally before indicating his feelings. The county commissioners from Teller County were also contacted and indicated their support.

In a letter dated March 22, 1963, to Senator Gordon Allott, Assistant Secretary Carver indicated the landowners favorable reaction, and the desirability of increasing the proposal to 6,000 acres so as to include a previously omitted unknown portion of the lakebed and to avoid some severances.

In the spring or summer of 1963, Congressman Chenoweth, in whose district the proposed monument was located, indicated that he felt the area had little public appeal potential and was too large. He asked that the NPS restudy the area to see if it might be reduced in size. Due to travel ceilings the study was not possible in F.Y. 1964.

On March 12, 1964, Congressman Chenoweth indicated to Director Hartzog that he hoped to visit Florissant during the Easter recess and might introduce legislation, but would not at this time ask for a draft of a bill.

INFORMATION FROM: Midwest Regional Office, 5/14/1964

Report by Rogers & Alberts, January, 1953

Bill H.R. 11834 to establish Florissant Fossil Beds National Monument introduced by Rep. Edgar Chenoweth in 1964. Rep. Frank Evans, who defeated Chenoweth, introduced the same bill in 1965 and 1967. Senators Gordon Allot and Peter Dominick also introduce legislation in 1967.

In 1968 a bill was introduced in the House for a smaller 1000 acre park. Concerned environmentalists Estella Leopold and Betty Willard invite Senator Allot to visit the Fossil Beds to gain his support of a 6000 acre park.

**1969**

Bill S. 912 introduced by Senators Gordon Allot and Peter Dominick and H.R. 5953 introduced by Representative Donald Brotzman to establish Florissant Fossil Beds National Monument 4 February 1969.

Park Land Company announces plans to develop 1800 acres of land within the proposed Monument, spring 1969.

Senate subcommittee hearing in Colorado Springs 29 May.

Florissant Fossil Beds National Monument legislation recommended by the Department of the Interior 5 June.

Senate Committee on Interior and Insular Affairs approves S.912 on 19 June.

Senate approves S. 912 on 20 June.

Defenders of Florissant bring suit in Federal Court to get restraining order against Park Land Company 9 July. Request was denied.

Defenders of Florissant appeal the Federal Court ruling and win the restraining order, which would expire at the beginning of August.

Defenders of Florissant make plans to blockade the bulldozers when the restraining order expires. Fortunately this action is not necessary.

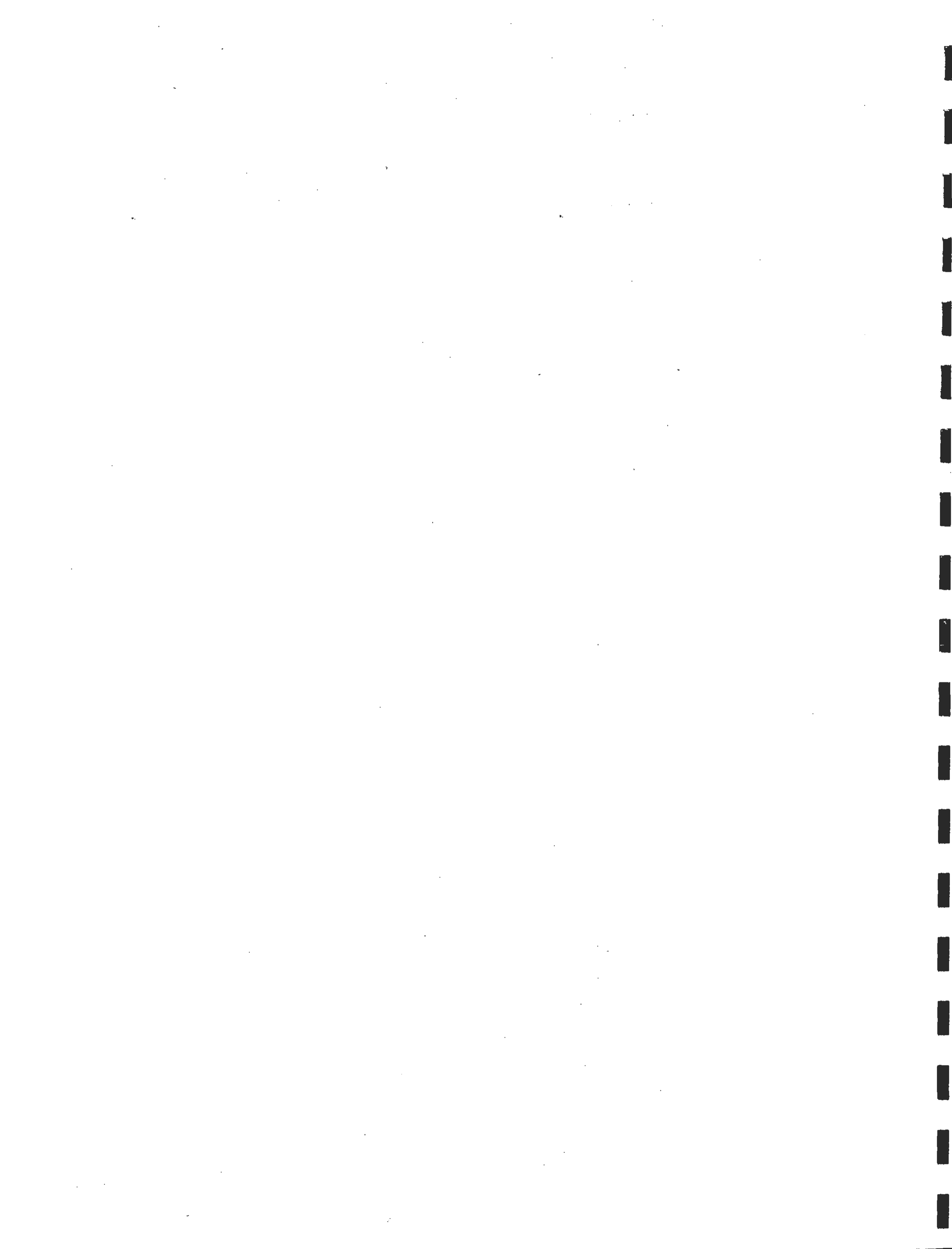
House committee on Interior and Insular Affairs approves S.912 with amendments 31 July.

House approves S. 912 on 4 August.

Senate approves S. 912 with House amendments on 7 August.

Public Law 91-60 signed by President Nixon 20 August 1969.





## CAPTIONS

1. David P. Long (5/28/1839 - 4/5/1906) and his wife Lydia Sens Long (3/12/1844 - 3/16/1892) are presumed to be the first settlers in the "petrified forest," in either 1871 or '72. Long is said to have uncovered the Big Stump while digging near his cabin. Their daughter, Atlanta Georgia "Attie" Long Thompson (7/16/1864 - 5/-/1939) chronicled their adventures in Daughter of a Pioneer. [from Daughter of a Pioneer]

2. Theodore Mead was a 19 year old college student when he made the first scientific collection at Florissant in September of 1871. [Rollins College Special Collections, Winter Park, FL]

3. The man in the white hat in front of the tent is A.C. Peale, who inspected the fossil beds for the Hayden Survey in 1873, and published the first scientific report on the area in 1874. This photograph was taken by William Henry Jackson (reportedly the man on the left) in 1871, probably in Wyoming. It shows a typical camp scene. 120 years ago scientists were often also skilled frontiersmen. The other men are G.P. Dixon (kneeling, photographer's assistant) and Dr. Turnbull. [USGS Photo Library, WHJ #500]

4. Dr. Samuel Scudder of Harvard was the pre-eminent paleoentomologist in the United States in the late 1800's. He learned of the Florissant fossil beds from Mead's fossils and Peale's report. In 1877 he visited Florissant for the first time, excavating about 5000 specimens in the "Scudder Pit" near the Big Stump. He published over 25 papers on his discoveries.

5. Professor Arthur Lakes accompanied Scudder to Florissant in 1877. He drew this map in 1878. It shows the lake deposits, and "Mr. Hill's" cabin in the center, the site of Scudder's dig. Adam Hill bought the land in 1874 after the Long family left.

6. The famous Big Stump. This photo was probably taken in the late 1880's. The wooden scaffolding was set up about 1883 to support machinery to saw the tree in sections to ship back east. The saws stuck and broke. The rusted blades can still be seen in the stump.

7. Two more views of the Big Stump. The one on the left may be from the 1870's. Note that it has not been excavated and is surrounded by petrified wood chips. This picture was originally a stereo-opticon view with a double image. [Denver Public Library] On the right is a postcard, postmarked 1917. The date of the photo is unknown, but it is probably after 1900. Note that the stump is completely excavated.

8. A postcard, probably from the turn of the century, showing typical tourists posed on the Big Stump. Note the remains of the scaffolding to the left of the tree. [Ute Pass Museum]

9. The Colorado Midland Railway, which reached Florissant in 1887, operated the famous "wildflower" excursion trains. Tourists could view Pikes Peak, pick flowers, and, in Florissant, dig for fossils as shown in this 1902 photo. [Colorado Historical Society]

10. Brochure of the Petrified Forest and Cripple Creek Touring Company. In 1919, \$5.50 would buy an all day ride in a Stanley Steamer up Ute Pass to the petrified forest and on to Cripple Creek. The company may have leased access to the forest from J.D. Coplen.

11. About 1922 John D. Coplen established the Coplen Petrified Forest Resort. He bought the Florissant railroad station, built in the late 1880's, from the defunct Colorado Midland, and moved it to within a few hundred feet of the Big Stump. He added a huge fireplace of petrified wood. When the Singer family bought the property in 1927, the building became known as the Singer Lodge. It was deemed too costly to repair by the Park Service, who had it removed in 1976. This photo was taken in the mid 1920's [FLFO]

12. Brochure for the Coplen Petrified Forest, 1922. [Penrose Library, Colorado Springs]

13. Early brochures for Singer's Colorado Petrified Forest and Broncho Dude Ranch. [FLFO]

14. The Singer Family in 1936. Left to right, back row; Jules Singer, tour guides Al Green and Bill Hatfield, Palmer and Agnes Singer. Left to right, front row; Maryann, John, and Keith Singer. Robert Singer, not shown, operated the forest after his father's death in 1954. [FLFO]

15. The "Scudder Pit" near the Big Stump, from a Colorado Petrified Forest brochure. The date is unknown. The man in the pit is reputed to be Scudder, but this seems unlikely. [FLFO]

16. Brochure for the Colorado Petrified Forest, probably from the 1960's. [FLFO]

17. Early brochures from the Henderson Petrified Forest, showing the various names of the operation. David Henderson excavated stumps and opened his tourist attraction sometime around 1924. (The Gold Camp Road was called the Corley Mountain Highway from 1922 to 1939.) [FLFO]

18. The Sequoia stump called the Trio was excavated by Henderson about 1922. The petrification of the stumps in this part of the valley is not as complete as in the Big Stump. Thus they weather and crack much more easily. The steel bands were installed to keep the trees intact. This photo appears in MacGinitie's book, Fossil Plants of the Florissant Beds, Colorado, published in 1953. The date of the photo is unknown. [FLFO]

19. Brochure for the Pike Petrified Forest, probably from the



1950's. The text is imaginative, if not accurate. [FLFO]

20. National Park Service informational handout from 1967, describing the proposed monument. [FLFO]

21. Defender of Florissant Vim Crane's vow to stand in front of the bulldozers inspired Pat Oliphant's cartoon in the Denver Post.

22. Richard Shillinglaw worked at Florissant as a seasonal ranger in the fall of 1970. These photos are from his journal.

23. NPS "brochure" from the early 1970's explaining that there was only "limited public access" to the Monument. Note the guided walk and picnic area on the A-frame road.

24. NPS brochure from 1975. The new visitor center was open, but the Hornbek Homestead was not yet restored for visitation. [FLFO]

25. NPS brochure used in 1980's (1990 revision shown). This was replaced by a color brochure in 1994.

26. One of the treasures of the Monument is the 1878 homestead of Adeline Hornbek, restored in 1976 by the Park Service. [FLFO]

27. Brief history of Adeline Hornbek, from "A Guide to the Hornbek Homestead at Florissant Fossil Beds National Monument." [FLFO]

28. Mount Saint Helens, Washington, 1980. After the eruption of the 39 Mile volcano some 35 million years ago, the Florissant area may have resembled these scenes of destruction.

29. This is what all the fuss has been about for the past 120 years. Some of the finest insect and plant fossils known have been collected at Florissant. Top is an extinct wasp, *Paleovespa florissantentia*. Bottom is a butterfly, *Prodryas persephone Scudderi*. Fossil butterflies are extremely rare.





David P. Long

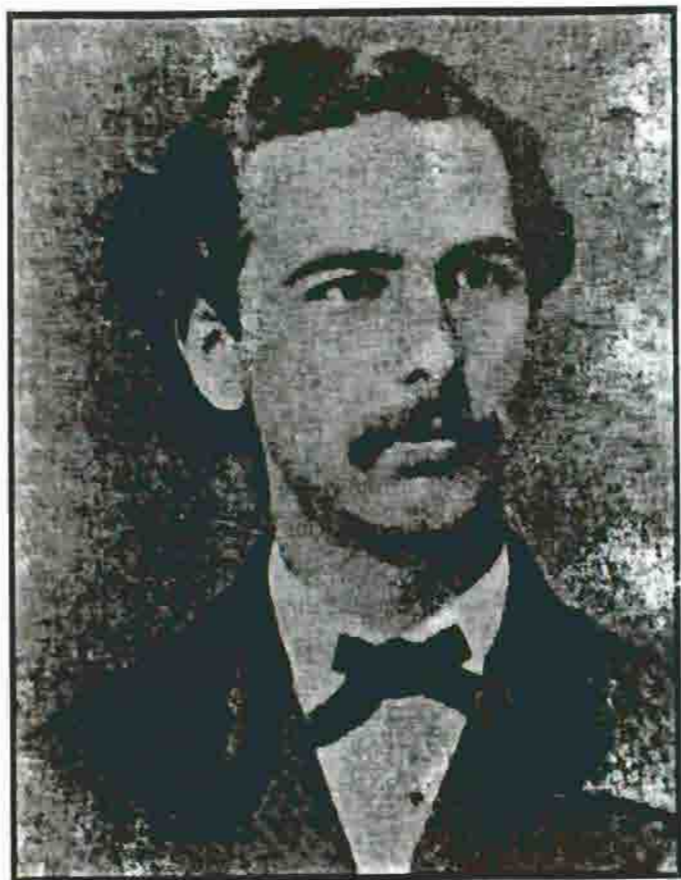


Lydia Sens Long



My first picture  
(The fall of 1891)





Theodore L. Mead as an undergraduate university student:  
at the age of 22 years.

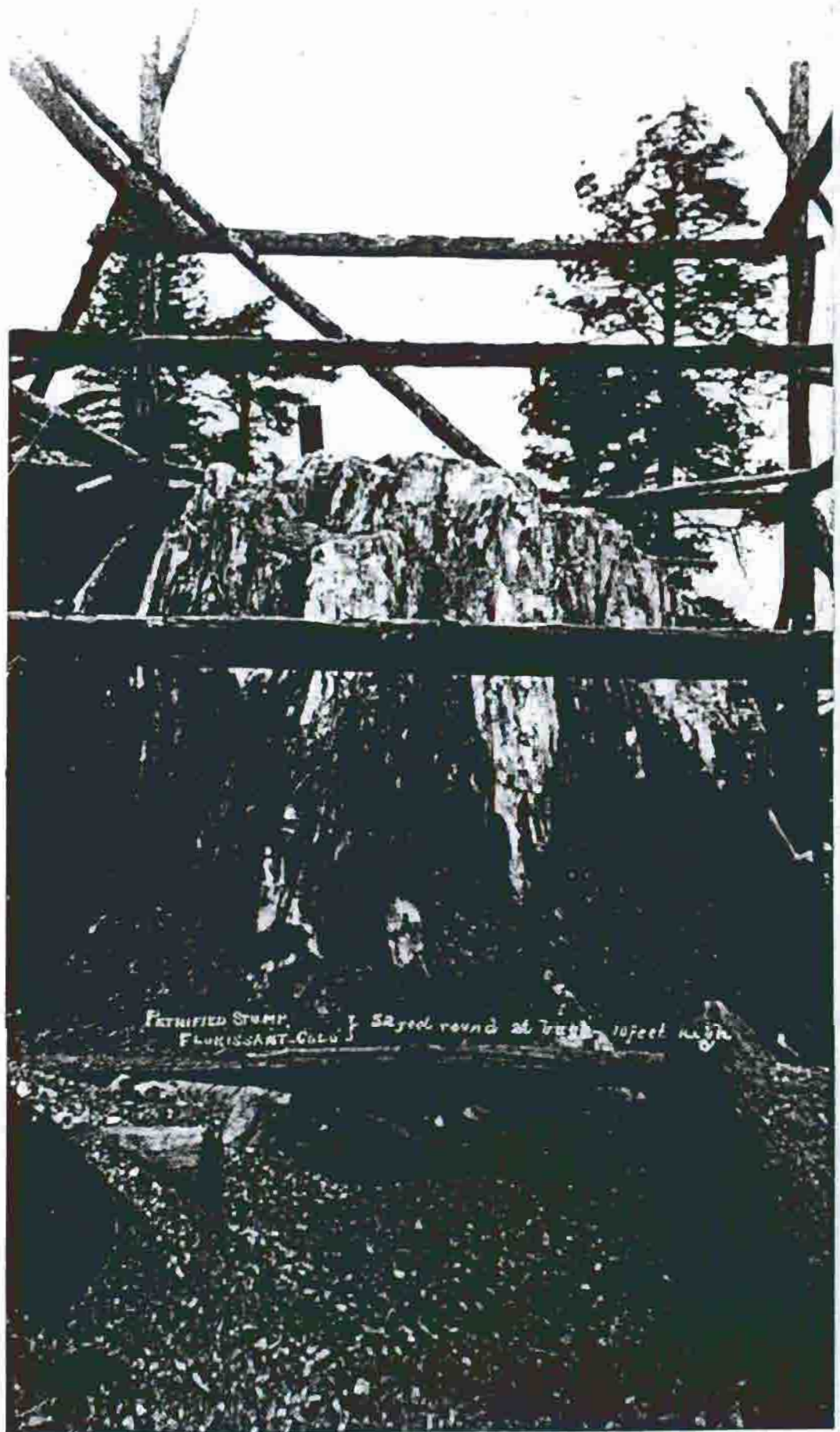




SAMUEL HUBBARD SCUDDER

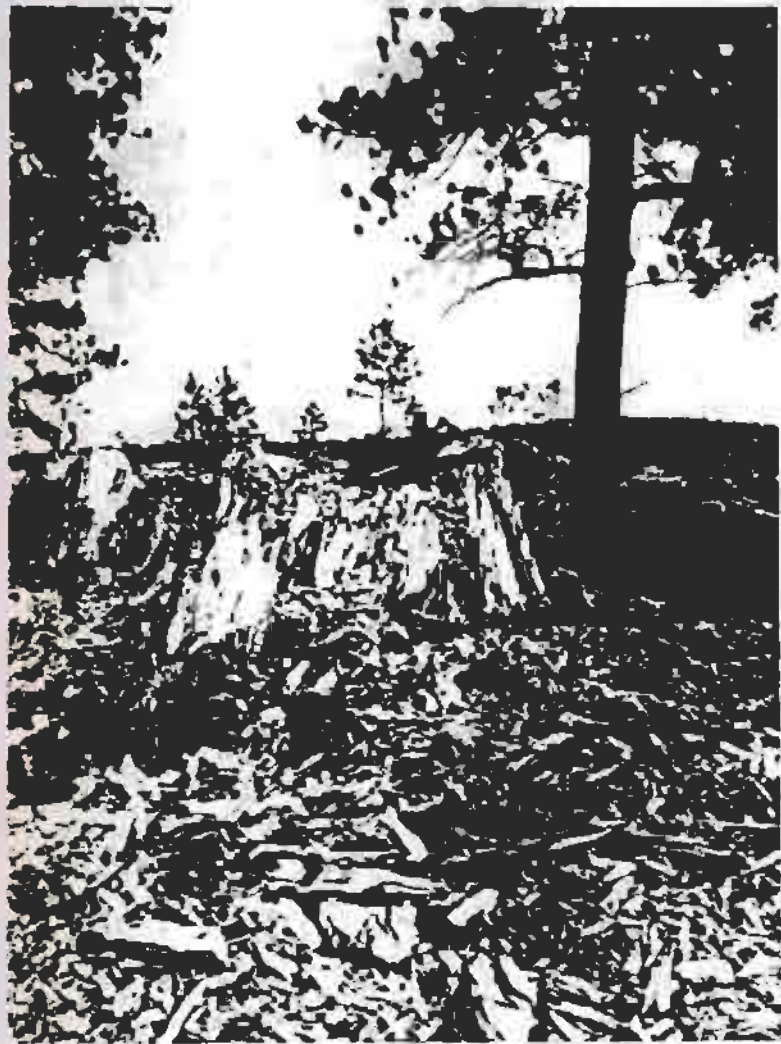






PETRIFIED STUMP,  
FLORISSANT, COLO. } Sawn round at base, 10 feet high.





Divine Public Library

Pedregal Camp: CA 1875



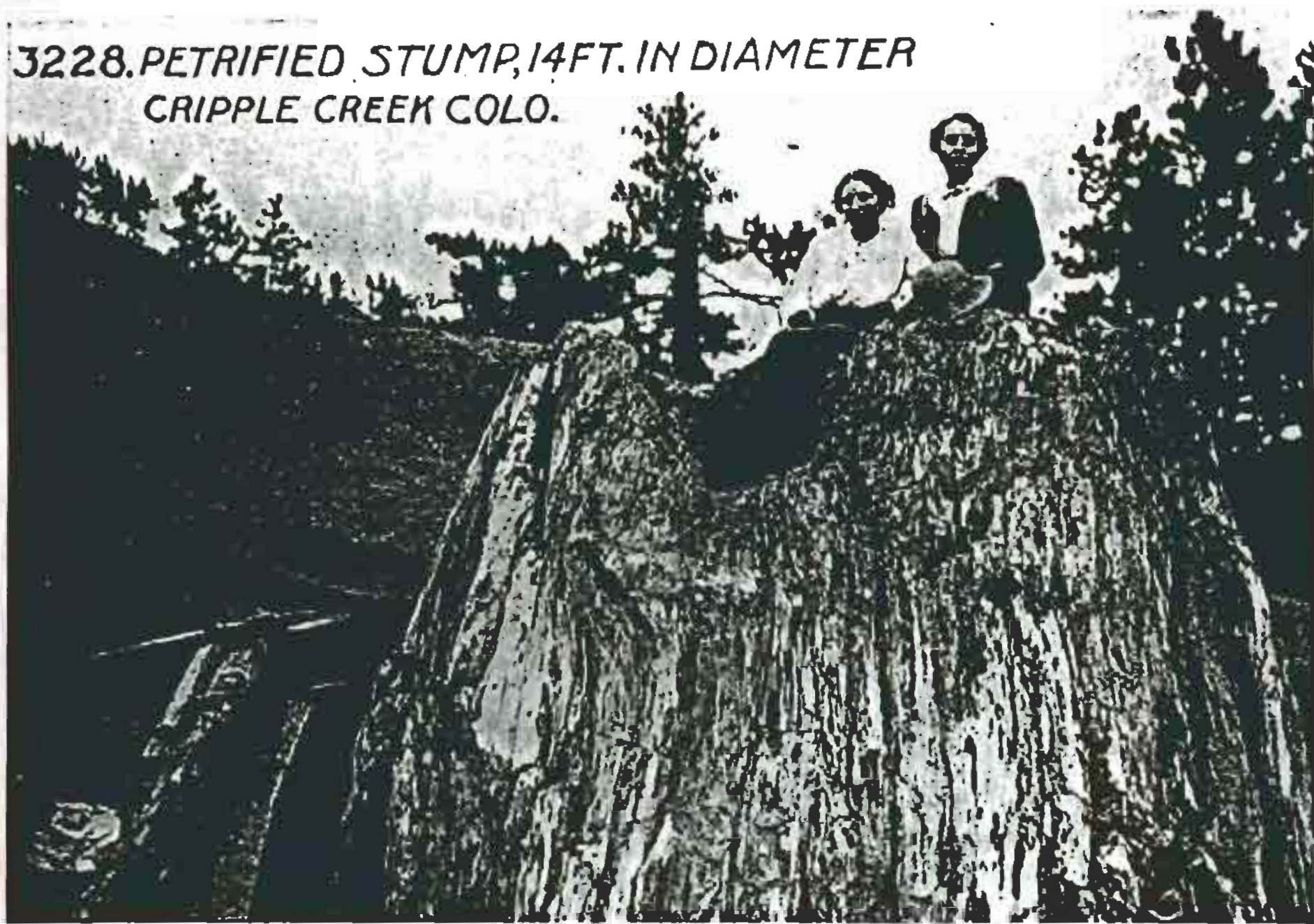
Some Petrified  
 tree. 73 ft dia.  
 3000 years old or  
 there about

Miss Hamilton  
~~Hayward City~~  
 Joplin Mo.  
~~W. Cook Hotel~~

W.B.



3228. PETRIFIED STUMP, 14 FT. IN DIAMETER  
CRIPPLE CREEK COLO.







## ROYAL GORGE AUTO TRIP and Famous Sky Line Drive

Is handled from our office, giving  
you the same organized service

Going by way of Dead Man's Canyon, Red Rock  
Canyon and Canon City where dinner stop is made.

Then to the Summit of the Gorge where you can look  
straight down 2,650 feet to the Arkansas River. This is  
the deepest and steepest gorge in Colorado.

Returning by the famous Sky Line Drive built by con-  
tract labor and overlooking Canon City and its beautiful  
arched country. A sight never to be forgotten.

125 Miles of Colorado's Grandest Scenery.

Get special literature at our office or your hotel.



Royal Gorge—See it from the top.



### THE PETRIFIED FOREST

The largest and finest trees in the world  
are shown on our Cripple Creek trip without  
extra charge.

It is our exclusive property and cannot  
be exhibited by any other tourist conveyance  
or railroad.

## CRIPPLE CREEK — VIA — PETRIFIED FOREST FOSSIL & WILDFLOWER BEDS BY AUTO DAILY



### SEVENTEEN TRIPS

ONE DAY  
ONE FARE



VIA HISTORIC UTE PASS ON THE OCEAN TO OCEAN HIGHWAY

### TRIPS COMBINED IN THIS ONE are

- 1st. Famous Ute Pass Canon
- 2nd. Cascade, Green Mt. Falls, Hayden Divide
- 3rd. Wild Flower Beds, Best in State  
(15 MINUTES STOP)
- 4th. Petrified Forest and Fossil Beds  
(30 MINUTES STOP)
- 5th. CRIPPLE CREEK GOLD CAMP  
(2 HOURS STOP)

## A \$12 TRIP for \$5.50

To adequately describe the wonders of this remarkable mountain trip by motor would take many pages. Nor can the visitor realize the indescribable grandeur and variety of the mountain scenery we traverse in this 110 mile scenic journey. Taken separately, the visitor would spend at least twice the time and money made possible by the splendid combination of five scenic trips.

We urge you to come to our office, for further information, where we can show you a number of the scenic views you will be shown en route. But better still, ask some friend who has already made the trip.

### The Trip in Detail

#### THE START

In charge of careful, competent drivers, who have been making the Petrified Forest Trip for years, in comfortable, easy-riding Stanley Steamers, the Passenger is carried from Colorado Springs to

#### UTE PASS

Manitou, past the famous effervescent Soda Springs and thence, via the Pike's Peak Ocean to Ocean Highway, northwest through beautiful, historic Ute Pass, by Rainbow Falls, to the pretty mountain village of Cascade, the starting point for the Auto Highway to Pike's Peak, many miles of which are seen from our cars. From Cascade to Green Mountain Falls, another attractive mountain resort, to the Hayden Divide, separating the watershed of this mountain country.

#### WILD FLOWER BEDS

Here we pass through fields of wild flowers, where throughout the season bloom a profusion of the beautiful wild flowers of the Rocky Mountain Region. A fifteen-minute stop to gather wild flowers is made.

#### PETRIFIED FOREST

The Petrified Forest and the Florissant Fossil Beds are next reached, a unique and picturesque region, which is controlled entirely by our company, and is for the exclusive enjoyment of our passengers. No other route or trip can enter the Petrified Forest, nor can the Forest be seen from the railroad. Here are many fully petrified tree stumps, the largest in the world

**8 to 25 feet in diameter.**

#### FOSSIL BEDS

Here, too, are the famous Fossil Beds of the Florissant Lake Basin, which ages ago, leaves, plants, fishes, insects, and many different flowers have been preserved by their impressions in the rocks. A stop of thirty minutes is made so that the visitor may have ample time to gather petrified specimens and fossils. Only by special arrangement with us can private cars be admitted to the petrified forest and fossil beds.

#### CRIPPLE CREEK

From Florissant the trip is made to Cripple Creek, the world's greatest Gold Camp, where many large mines, famous the world 'round, are still producing their scores of millions of gold. A two-hour stop for lunch is made and opportunity to see a producing gold mine, and to secure specimens of gold-bearing ore is offered.

The return trip is made by a different route, going down four-mile hill to Divide with an exceptional chance to observe the north side of Pike's Peak, and several beaver-dams.

We pride ourselves on our service. A reliable established company, with courteous, reliable guides and drivers over splendid roads, without dust or cinders, makes an ideal day's outing. Ladies traveling alone receive every courtesy.

For private parties, we provide special touring cars.

Over mountain and canon, several hundred feet above the railroads, our trip offers an incomparable

**Day through the Rockies**

**Reserve All Seats in advance**

**PETRIFIED FOREST AND CRIPPLE CREEK  
TOURING CO.**

**Colorado Springs Office 16 E. Pike's Peak Ave.**

*With Korsemeyer Drug & Kodak Supply Store*

**Phone Main 841**

**Cripple Creek cars leave at 8:15 a. m.**

**Royal Gorge Cars leave at 8 a. m.**

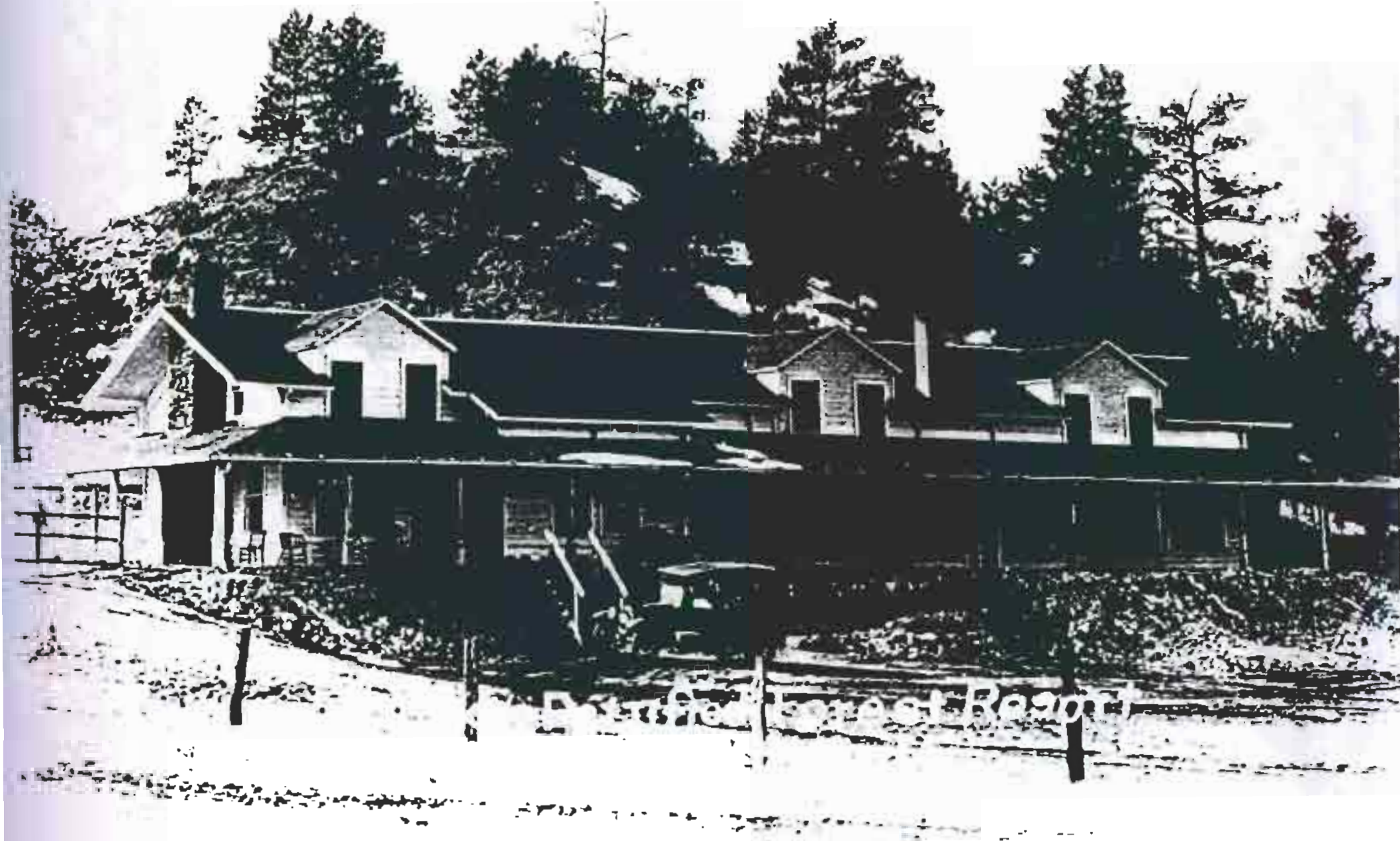
**Cripple Creek Combination Trip,  
110 miles, many stops, fare \$5.50**

**Royal Gorge Sky Line Trip  
125 miles, fare \$6.50**

**Information on all trips at our office**

SEE CASCADE, GREEN MOUNTAIN FALLS, PETRIFIED FOREST AND CRIPPLE CREEK







Colo Petrified Forest

# COPLEN PETRIFIED FOREST

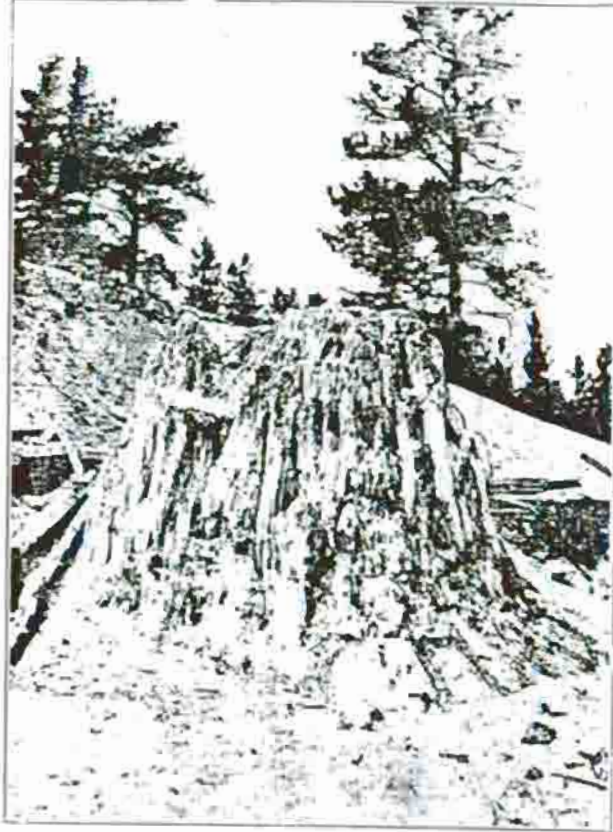
COLORADO COLLEGE LIBRARY



Folders of this character are often relegated to the waste basket without being read but this should be preserved and find a place in the library of every family, at least in the State of Colorado, for it is a progressive but concise history without embellishment of a spot central in a vast district, important for its pure mountain air, mountain water, fishing, hunting and camping, well known for its pine forests and natural parks, all of which are now and will be sought by the multitudes in the coming years.

**J. D. COPLEN, Owner**  
Pioneer of Colorado.

Business Address:  
Florissant, Colorado.



This PETRIFIED FOREST was discovered in the early pioneer days of Colorado. It stands out conspicuously as one of the great wonders of the world

**NO VISIT TO COLORADO SPRINGS**  
Or vicinity will be complete without a trip to this "STONE FOREST"

Copyright, 1922, by J. D. Coplen

## The Coplen Petrified Forest

**I**S SITUATED about two miles south of Florissant on the main road leading from Florissant to Cripple Creek, in Teller County, Colorado, and may be reached through the main public highway, thirty-six miles westward from Colorado Springs, through Ute Pass, and from the west over any of the main roads leading to Colorado Springs as indicated by guide boards along these lines.

THE RANCH containing the Petrified Forest, consists of 160 acres, the scenic beauty of which is comparatively unsurpassed, and is largely covered by the lava bed which is a most conspicuous feature in connection with the Petrified Forest. And while some outside specimens may be seen on the place, The Coplen Petrified Forest itself, is encompassed in a circular area of about ten acres and may all be seen from one central point.

THE COPLEN PETRIFIED FOREST consists chiefly of petrified stumps and fallen trees, a number of which have been exposed by excavation. The main specimen as pictured, stands 14 feet high and its diameter at one foot above the ground is 18 feet. The logs or fallen trees have not been fully excavated but some are known to be more than 100 feet long; and this year the work of unearthing many more specimens of stumps and logs which are already known to exist, will be pushed. Building activity will also go forward.

THESE STUMPS and trees, while now solid rock, were doubtless of the Redwood variety of California known as the Giant Sequoia; at least they are so pronounced by eminent geologists such as Prof. Scudder, Dr. Cockerell and others of note who have given careful study to this part of the country.

THE AVERAGE ALTITUDE of The Coplen Petrified Forest above sea level at this time is 8300 feet. The stumps stand verticle with the roots apparently in place where they grew, which seems good evidence that the country has not been lifted or disturbed and no violent upheaval has occurred except the one which threw down these mammoth trees. After this, the earth settled back in place and was not further disturbed except by the jar and rumbling of the emitting and flow of the molten matter into the lake.

THIS RAISES AN INTERESTING QUESTION:—Has Redwood ever been known to grow at an elevation of 8300 feet above sea level in this latitude and

rigorous climate? At least no Redwoods are now growing in Colorado. Hence the hypothesis confronts us:—that this forest either grew at an age when the Earth's surface was warmer or in a protected basin where the atmosphere was tempered by hot springs or eruptions somewhere in the country round-a-bout.

ALSO the extensive shale beds made of the lava material, Rhyolite, that buried these stumps and logs, containing as it does fossilized remains of insects and plants that belonged to a tropical climate, bears heavily upon this subject.

BY COMPARING our largest Petrified Stump with the large Redwood trees now growing in California and the estimate of their age, it is fair to assume that the growth of this tree was 5000 years, at the end of which time, it is self evident, the volcanic eruption occurred. As the stumps and trees show unmistakable signs of having been burned when they were green and the fire extinguished quickly, a lake must have been formed at once. This in turn evidences the cause of the petrifying of the wood, for petrifications are caused by the dissolving of silica in hot alkaline waters raised to a high degree of heat, (which presumably was done by the molten lava already referred to), the silica entering the wood and taking the place thereof.

HOW LONG these huge stumps and logs lay boiling in the silica solution to effect complete petrification, to their very hearts, remains a mystery. Later on, the waters of the lake by washing and scoring down of the mountain barriers, was emptied to the north, doubtless along the same channels as now existing, to-wit: the South Platte River and its tributaries.

THE MIOCENE AGE, at which scientists fix the time of this occurrence, has been placed by them at about 55,000 years ago. Let us pause and reflect! Those who have viewed these stumps and logs and read this book have virtually lived 55,000 years:—at least in these grand and inspiring events; for the stumps now stand exactly where they stood and first took root, and the logs lay in exactly the spot where they first fell, with no change except their transition from wood to stone; occupying no more nor less space, holding firmly to their beds; mute, but an open book that tells the tale of that long period of time.

SO FAR as we can find out, and we have visited the Petrified Forests of both Arizona and California, we have the largest Petrified Stump in the world and we challenge anyone to a comparison of facts.



*Visit the Original*  
**Colorado  
Petrified Forest**

*The Geological Wonder  
of the 'Pecos Plate' Region*  
Interesting - Fascinating - Marvelous

—><—  
ORIGINAL  
COLORADO PETRIFIED FOREST  
FLORISSANT, COLORADO

**Dude Ranching**  
For a Week or a Year  
**Is Great Sport**

*Great Hunting and  
Fishing Country  
In the Rocky Mountain  
- 1929 -*

BRONCHO DUDE RANCH  
FLORISSANT, COLORADO



*Petrified Stump of Giant Sequoia, Original Colorado Petrified Forest*



*Colorado*  
**PETRIFIED FOREST**

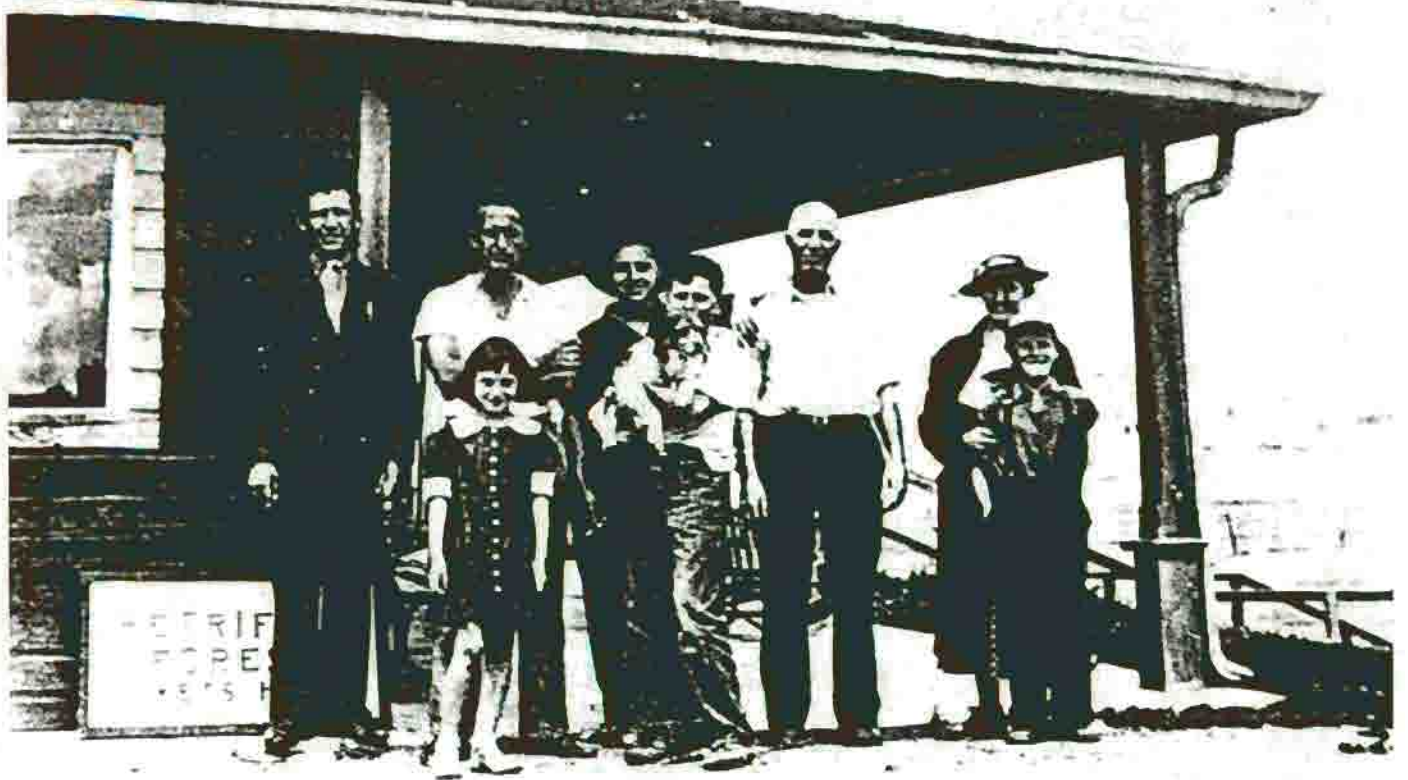
INTERESTING  
EDUCATIONAL  
FASCINATING

*Colorado*  
**PETRIFIED FOREST**

INTERESTING  
EDUCATIONAL  
FASCINATING



**ENTRANCE GATE AND LODGE OF THE COLORADO PETRIFIED FOREST**

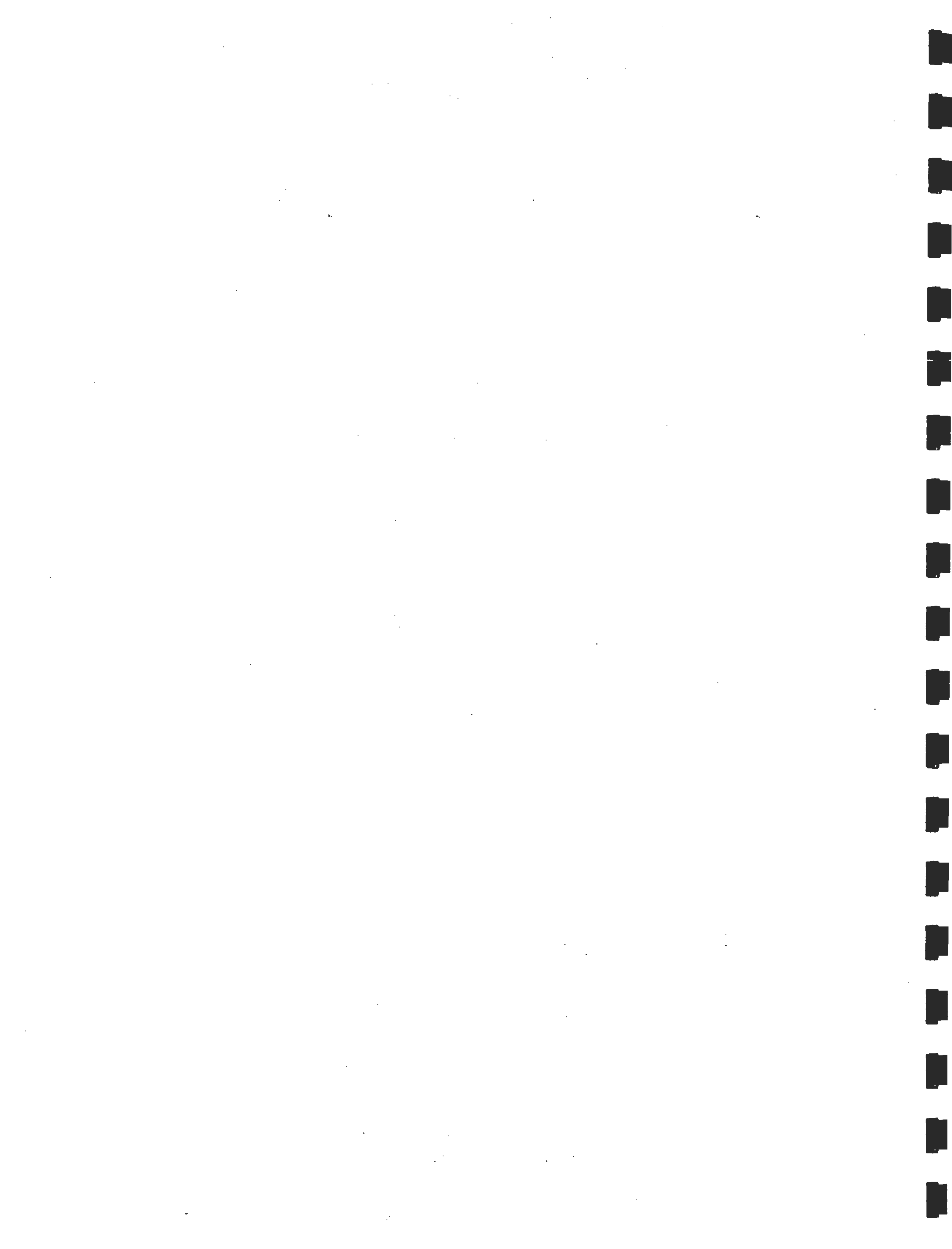


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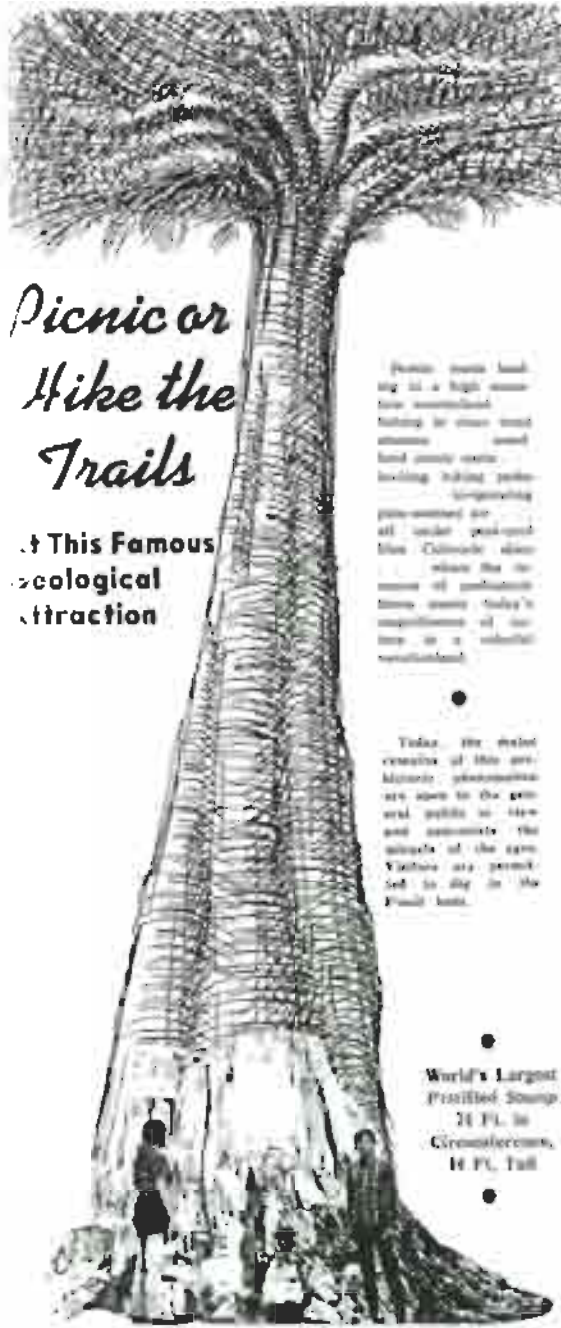


*Fossil Beds, Original Colorado Petrified Forest*

15







*Picnic or  
Hike the  
Trails*

**At This Famous  
Geological  
Attraction**

**Colorado's Outstanding  
Geological Attraction**

Richest Fossil Beds  
For Oligocene Insects  
In The World

These trees had  
up to a high water  
table in their  
trunks and  
had many  
insects boring  
holes in them  
before they  
were petrified  
by mineral  
deposits. The  
Colorado state  
has the  
most of petrified  
trees today. Today's  
petrified trees  
are in a  
national  
monument.

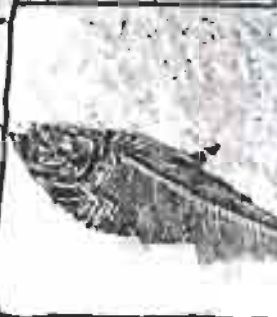
Today the most  
valuable specimens  
are seen in the  
general public in  
state and  
national  
monuments.  
Visitors are  
permitted  
to dig in the  
fossil beds.

World's Largest  
Petrified Stump  
24 Ft. in  
Circumference,  
16 Ft. Tall



**History  
Preserved  
In Rock**

*Colorado* **PETRIFIED  
FOREST and  
Fossil Beds**



ENTRANCE ON HWY. 1  
TWO MILES SOUTH OF U.S. 24  
FLORISSANT, COLO.

You've Heard About

This Great  
Petrified Forest and  
Fossil Beds

Now See It!

Against the majestic background of Pikes Peak, the Colorado Petrified Forest stands today, one of the great wonders of the postglacial era — a fascinating remnant of the prehistoric "Age of Mammals." Here at 8,200 feet above sea level, thousands of visitors are proof each year that the great Redwoods of California once grew in the Rocky Mountain region.

Surrounded by an immense timberland, the Colorado Petrified Forest, two miles south of Florence, Colorado, contains the world's largest petrified stump above ground. (Gigantic fossils more than 20,000,000 years old are found in the beds and many are preserved at the park museum. Visitors may also see numerous specimens of prehistoric life from the beds — the largest variety in any one field—including strange insects, extinct marine life and animal flora.

Excursions, well underway, give revealing views upon petrification — more educational and interesting



See the petrified wood strewn on the beds. Visit the museum at nearby

## ENTRANCE GATE AND LODGE OF THE COLORADO PETRIFIED FOREST



ADMISSION  $\frac{1}{2}$  Ad.  
Adults (per person)  $\frac{1}{2}$   
Children (6 through 11) .50c  
HOURS — 8 a.m. to 7 p.m.

scientific interests—include the lava beds, fossil beds, logs and stumps already open to the public. In fact, the fossil beds are a veritable paradise for fossil hunters.

Discovered in pioneer times, the Colorado Petrified Forest was once the site of a small inland lake — town of the dinosaurs. Today, the park is a modern sanctuary to the

REGULATIONS — It is unlawful to dig, quarry, break up, appropriate specimens or portions thereof or dig the whole tree trunk within the boundary or to destroy, remove, damage or mark any rock, shell, fossil, or other works of primitive or prehistoric man, or scientific importance and discovery shall be prohibited to the full extent of the law.

ancient heart of Colorado with its wooded trails, spots for hiking trails, and mountain fishing.

At the main lodge, accommodations for overnight guests, souvenir store, and fossil museum afford enjoyment for all the family. It's the Pikes Peak Region hospitality comes from all the mountains may be easily reached — Cripple Creek, Mt. Placid, the Gold Camp, Lake George, Eleven Mile Corral, Royal Gorge, Manitou Springs, Cave of the Wood-Cut Dwellings and Pikes Peak.

The Colorado Petrified Forest and fossil beds is a wonder — preserved in rock — an outstanding geological attraction in the land of sunshine. Once the home of the dinosaurs, it is a must on your vacation itinerary.





# HENDERSON PETRIFIED FOREST

(Formerly the OLD Petrified Forest)  
in the heart of the

# HENDERSON PETRIFIED FOREST

(Formerly the NEW Petrified Forest)  
FLORISSANT, COLORADO

## HENDERSON PETRIFIED FOREST

Be Sure the Entrance Reads  
This Is the  
Entrance  
Gate. Look  
for the  
Double  
Drive

## HENDERSON PETRIFIED FOREST TICKET OFFICE

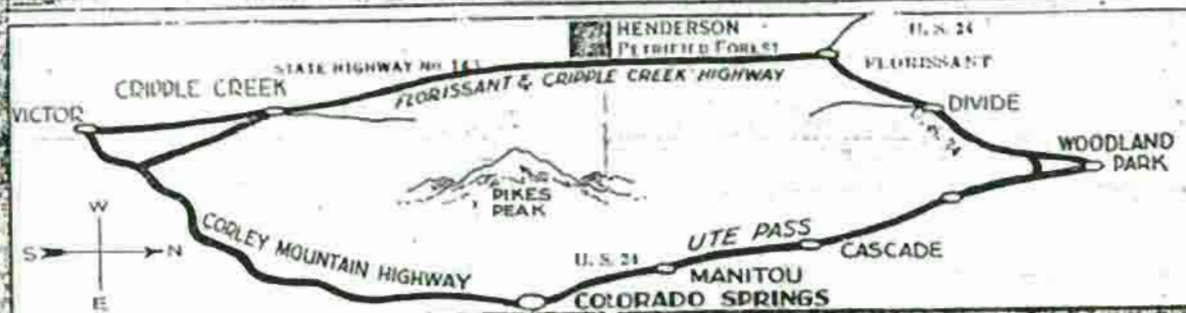
## HENDERSON PETRIFIED FOREST

Be Sure the Entrance Reads  
This Is the  
Entrance  
Gate. Look  
for the  
Double  
Drive



Tickets Are Sold at the Entrance Gate

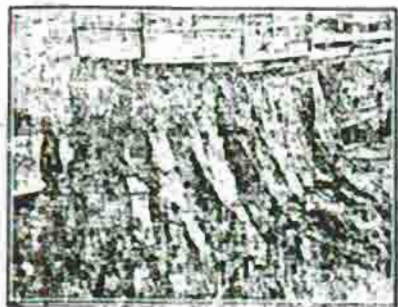
Tickets Are Sold at the Entrance Gate



D. H. HENDERSON,  
PRESIDENT

I. D. HENDERSON,  
SECRETARY

L. A. HENDERSON,  
TREASURER



This Stump is 101 Feet High and  
174 Feet in Diameter

## The New Petrified Forest

Florissant, Colorado

Is the most wonderful of its kind to be found in the United States. According to eminent scientists, this Forest has a history dating back 50,000 years or more. They also pronounce these mammoth stumps and logs to be of the Redwood or Sequoia gigantic variety, the same as is now growing in California. Visitors coming to Colorado should not fail to see this wonderful Forest.

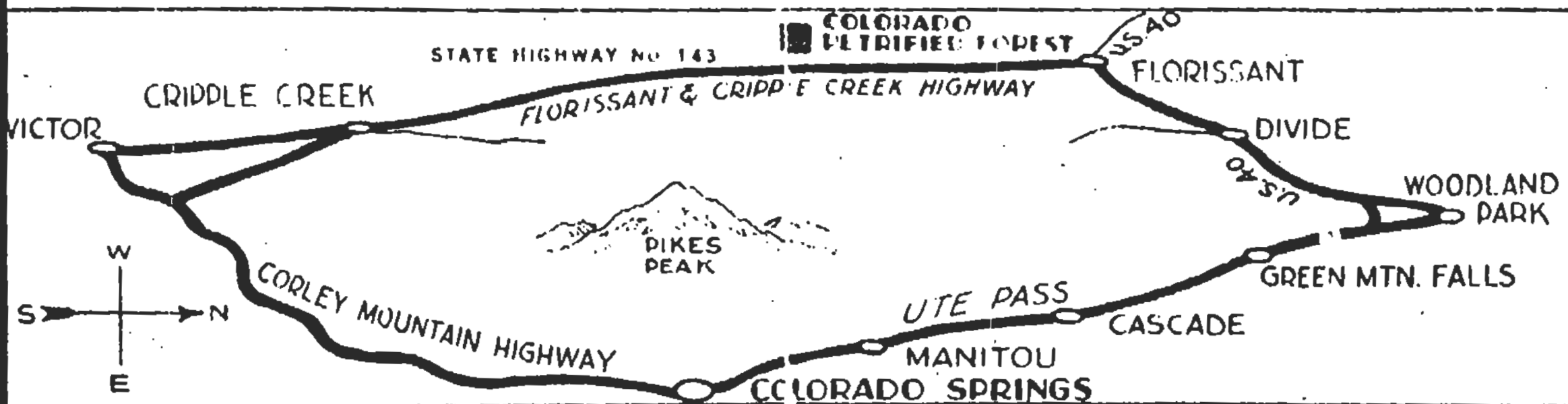
Further Information Regarding this Wonderful Forest Furnished on Request

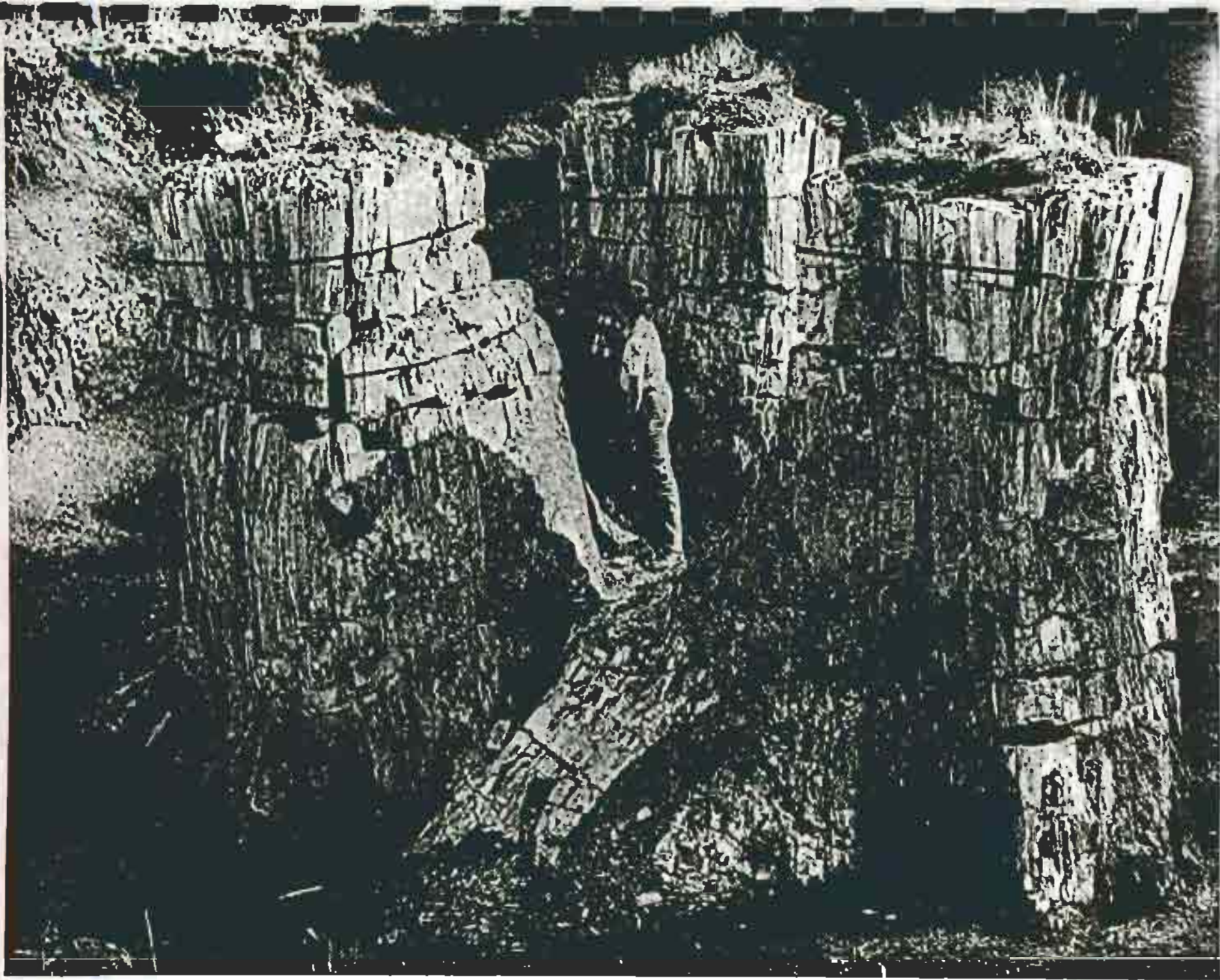
FLORISSANT, COLORADO



# COLORADO PETRIFIED FOREST TICKET OFFICE

GET  
YOUR  
TICKETS  
HERE









**PIKE** **PETRIFIED FOREST** 1/2 Mile South of Florissant, Colorado  
 The Remarkable Petrified Tree is 10 1/2 Feet Long, Diameter 17 1/2 Feet, Weight 140 Tons



Centuries ago these mammoth tropical and sub-tropical trees flourished here in what is now the heart of the Rockies. See these pre-historic forest giants. The four that you will never forget. Millions of years of history is stored for the visiting patrons. head...

**PIKE** **PETRIFIED FOREST** 1/2 Mile South of Florissant, Colorado on Highway 9



**PIKE** **PETRIFIED FOREST** 1/2 Mile South of Florissant, Colorado on Highway 9



the forest that will be displayed in its famous display throughout the world. EDUCATIONAL

Drive west out of Colorado Springs, over U.S. Highway 24 through famous Ute Pass, a ride of scenic grandeur completely circling Pikes Peak, to Florissant, Colorado, then 2 1/4 miles south on Route 9 to the double drive archway of Pike Petrified Forest which is outstanding among scenic attractions in the Rocky Mountain Empire for fascinating, mystifying, and awe-inspiring educational interest. See these pre-historic forest giants that grew here millions of years ago, said by scientists to have been Redwood or Sequoia species, which only grow under tropical or semi-tropical conditions.

Pike is the home of the world famous Trio at which thousands of visitors annually marvel—the colossal specimens of the world.

Only Petrified Trio in the World, with base diameter 27 ft., has trunk 6 ft. in diameter, stands 13 1/2 feet high.



The PIKE PETRIFIED FOREST is surrounded with 20 SPECIAL ATTRACTIONS.

#### FREE MUSKIE—FIREPLACE

The main building contains: light museum, auto shop, mineral displays, Southwest museum, petrified wood jewelry which is hand made.

See the gorgeous array of various paint brush of colors in this polished petrified wood fireplace. Names used about 1 1/2 million years for this color effect.

Each year Pike Petrified Forest will add a new specimen as it will always be the outstanding attraction that weather nature has provided for the public's viewing of petrified wood.

Scientists, archaeologists, and geologists tell us that at one time these forests reached to the ocean's floor, with a later submergence resulting in the Sycamore Mader stage of which the Rocky Mountains and the Pike Peak Region are a part.

The Pike Petrified Forest and the forest bed clearly indicate that this area was for many, many years on the ocean's floor.

While touring the forest, you may dig in these fossil beds which are approximately 40 million years old.

Pike has the largest growth rings that have been found in either petrified wood or living trees of today, indicating what climatic conditions which is explained as you tour this awe-inspiring educational attraction, along with numerous other specimens that make up the forest.

The largest petrified trunks in the world are 7 1/2 miles south of Florissant, Colorado in the Pike Petrified Forest, and are reached through Ute Pass from Manitou Springs over the gold camp road from Colorado Springs, or on the Canon City and Royal Gorge Circle tour.

All other attractions easily reached from Pike are Cripple Creek, Vinton, Mt. Pugh, Lake George, Silver Mile Canyon, Pike Peak, Cave of the Winds, Van Briggs Art Pottery, Seven Falls, Cliff Dwellings.

Hours and Regulations—It is desirable to observe all appropriate specimens and of any that found in the Pike Petrified Forest, or natural formations, in any season, and entrance will be permitted in the full extent of the law. OPENALTY — 1/2 to the nearest dollar (20c) 1/2 to 60c (3c) outside establishment, or back.

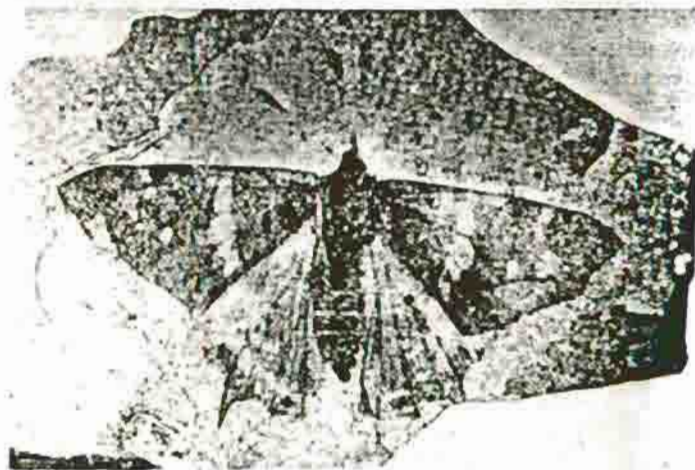
Admission  
 Adults (per person) \_\_\_\_\_ 50  
 Children (under 12) \_\_\_\_\_ 20

Pike is Colorado's Largest Petrified Forest.





The rare quality of the Florissant Fossil Beds lies not in dramatic exposures of big-boned creatures, but rather in the delicacy with which thousands of fragile insects, tree foliage, and other forms of life have been preserved that are completely absent or extremely rare in most paleontological sites of this period.



*Proposed*

# FLORISSANT FOSSIL BEDS

## National Monument

### Colorado

Thirty-five miles west of Colorado Springs, near the small community of Florissant, Colorado, is the site of an ancient lake that existed some 40 million years ago during the Oligocene period of geologic history. Here is a classic area for the study of paleontology—known the world over to geologists, botanists and entomologists. The insect fossils at Florissant are of primary significance, representing the evolution and modernization of insects better than any other known site in America. In addition, the fossil flora, emphasized dramatically by the petrified tree stumps and in more subtle tones by the great variety of leaf fossils, greatly adds to the primary values.

For thousands of years, the scene in the vicinity of the Florissant Lake Beds was probably one of strange tranquility, with the silence broken only by the buzzing of insects in the subtropical foliage, an occasional bird-song, or the sounds of large mammals which then inhabited the areas. Then, violent volcanic eruptions began nearby. Molten lava welled up from deep within the earth, and tremendous explosions of pulverized rock occurred, filling the air with dense clouds of dust and fine particles of volcanic ash.

Swept forward by the prevailing wind, these great ash clouds rained down upon the lake and its forested shores, carrying insects and leaves to the bottom. Quickly buried and sealed off from the air, these remains did not decay. As one ash-fall followed another, layer upon layer of paper-thin shale accumulated in the lake bottom and such insect life and plant foliage as were carried down became pressed and sealed within these deposits.

Individually quite small, the fossils at Florissant are tremendous in the aggregate. Florissant is unique in having yielded some 60,000 specimens of over 1,000 different species of life, and in the remarkable way in which the fine-grained ash has preserved—in minute detail—the delicate features of innumerable specimens. Almost all the fossil butterflies of the New World have come from the ancient Florissant Lake Beds. The site also includes many giant petrified tree stumps—buried and preserved by volcanic ash mudflows exactly where the trees were rooted and growing. Impressive because of their considerable bulk and mysterious presence, they are striking examples of fossilization of vegetable material.

Proposed is the Florissant Fossil Beds National Monument which would consist of a compact unit of some 6,000 acres to preserve the more suitable portions of the Florissant Lake Beds, as well as the natural setting of the picturesque valley itself. The Secretary of the Interior's Advisory Board on National Parks, Historic Sites, Buildings and Monuments endorsed this proposal in May 1962 and October 1965.

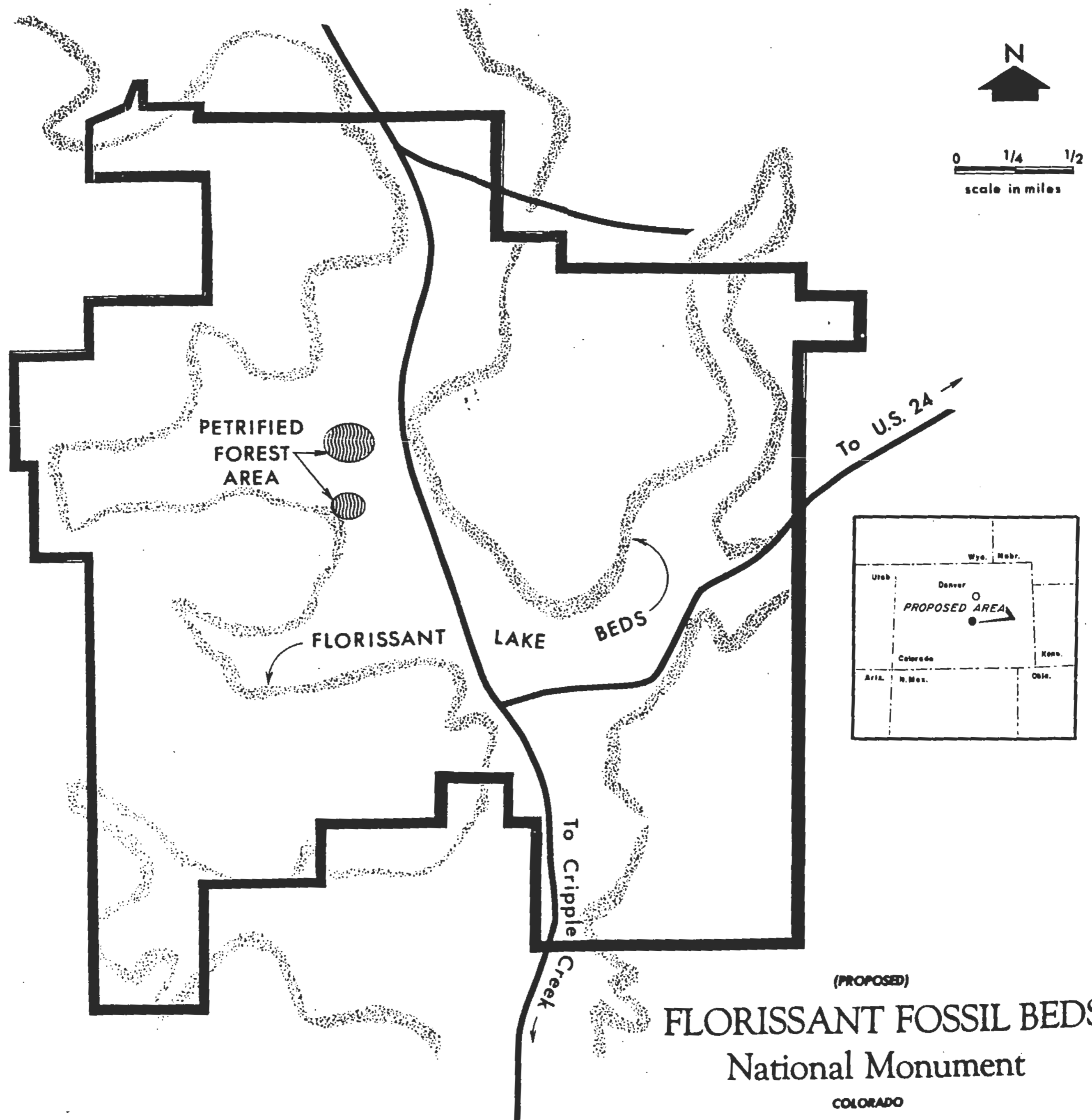
Easily accessible, the Florissant site is within an hour's drive of the tourist attractions of the highly developed Colorado Springs—Pike's Peak region. U.S. Highway 24 passes through the north arm of the fossil beds and the north-south Interstate 25 is 35 miles to the east.

Establishment of the Florissant Fossil Beds as a national monument would require Congressional authorization as well as appropriation of sufficient funds to acquire privately owned lands within the proposed area.



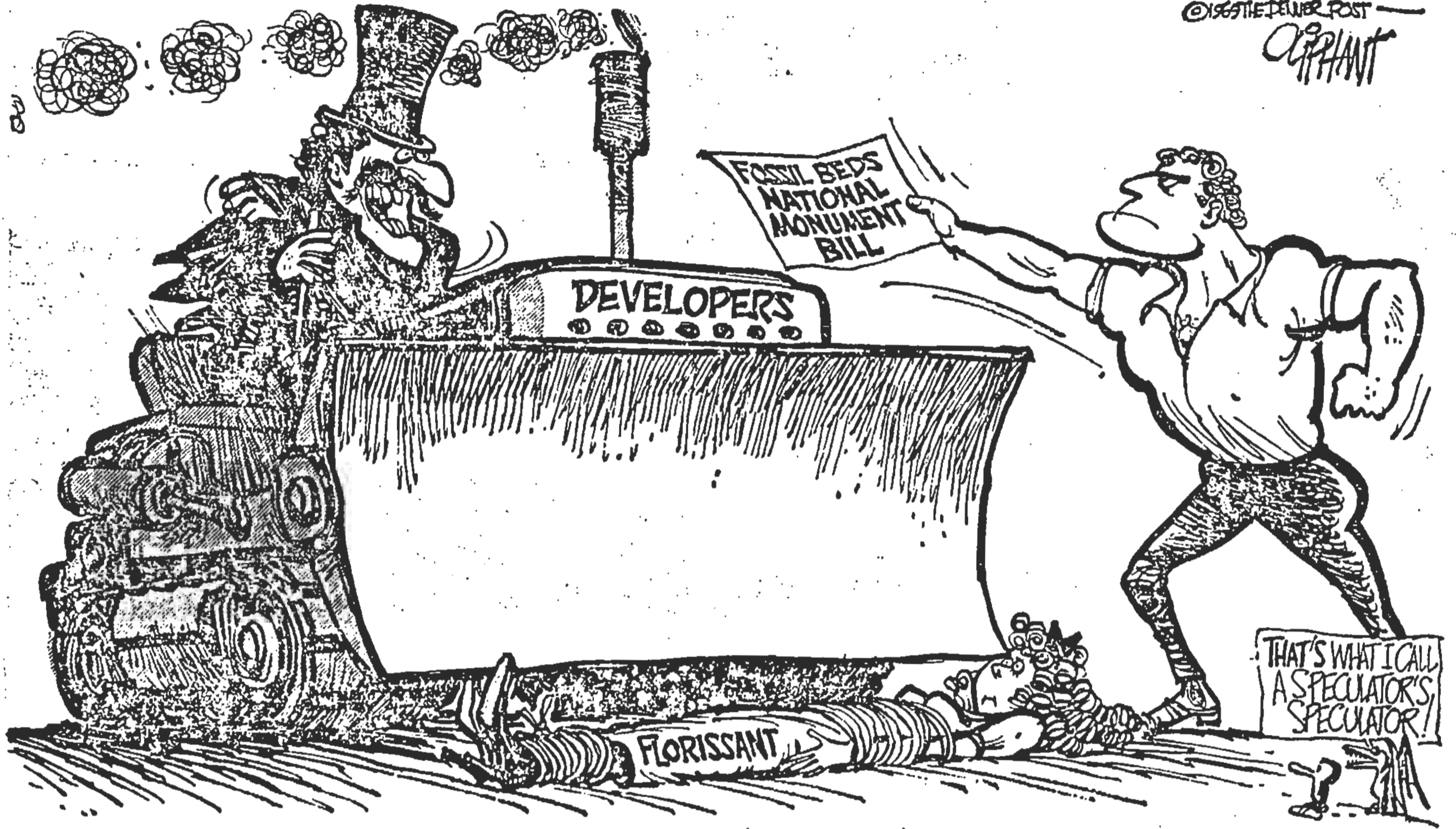
As the Nation's principal conservation agency, the Department of the Interior works to assure that non-renewable resources are developed and used wisely, that park and recreational resources are conserved, and that renewable resources make their full contribution to the progress, prosperity and security of the United States—now and in the future.

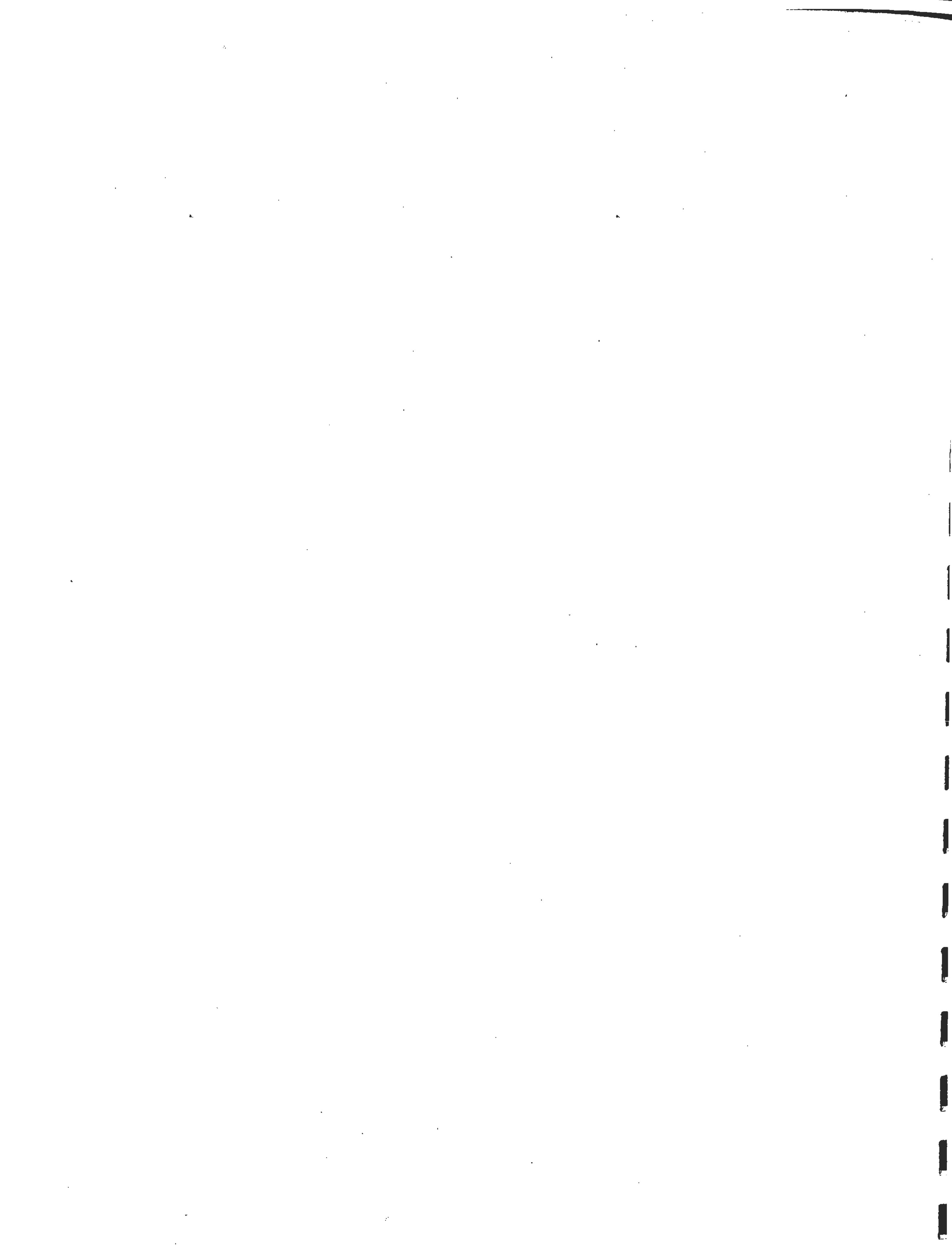
The National Park System, of which the Florissant Fossil Beds National Monument would be a unit, is dedicated to conserving the natural, historical and recreational heritage of the United States for the benefit and enjoyment of the people.



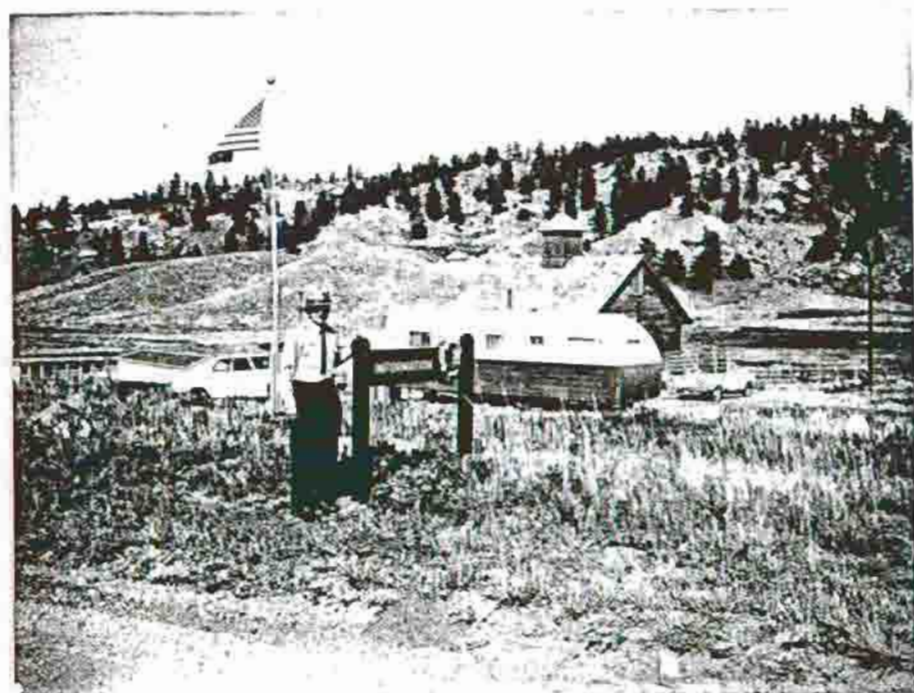
'CURSES! VERY WELL, LET'S TALK MONEY!'

©1967 THE DENVER POST  
OPPHANT









Richard L. "Dick"  
Shillinglaw

The "Maytag" barn  
in background

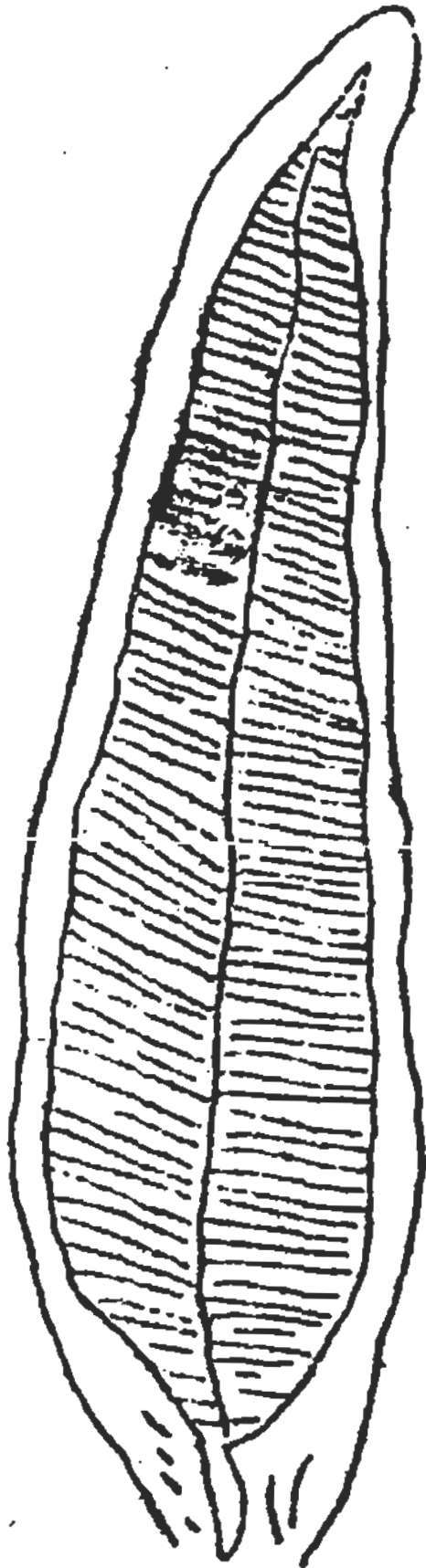


Sign at junction of  
Teller Co. No. 1  
with  
Upper Twin Rocks Road



COLORADO

# Florissant Fossil Beds National Monument



FLANKED BY MAJESTIC PIKES PEAK TO THE SOUTHEAST AND HISTORIC CRIPPLE CREEK DIRECTLY SOUTH, FLORISSANT FOSSIL BEDS NATIONAL MONUMENT REPRESENTS A UNIQUE AND INTERESTING STORY.

CONGRESS AUTHORIZED THIS NATIONAL MONUMENT ON AUGUST 20, 1969; PRESERVING ANOTHER IMPORTANT CHAPTER IN THE NATURAL HISTORY OF OUR NATION. LOCATED AT AN ELEVATION OF APPROXIMATELY 8,300 FEET, THIS ANCIENT LAKEBED REPRESENTS A STORY OF EONS OF TIME.

DO NOT BE FOOLED BY THE HILLSIDES WHICH MAY LOOK LIKE THE SHORES OF THE ORIGINAL LAKE. THESE REPRESENT MUCH MORE RECENT GEOLOGICAL FORMATIONS. THE AREA TODAY IS CHARACTERIZED BY TREE-COVERED HILLS AND RIDGES SURROUNDING SMALL GRASSLAND MEADOWS WHICH ARE DOTTED WITH THE COMMON WILDFLOWERS OF THIS ELEVATION IN THE ROCKIES. PAINTBRUSH, LOCO, AND SENEJO ARE COMMON PLANTS YOU MAY BE ABLE TO RECOGNIZE AS YOU DRIVE THROUGH THE AREA, BUT THEY, TOO, CHANGE WITH THE SEASONS.

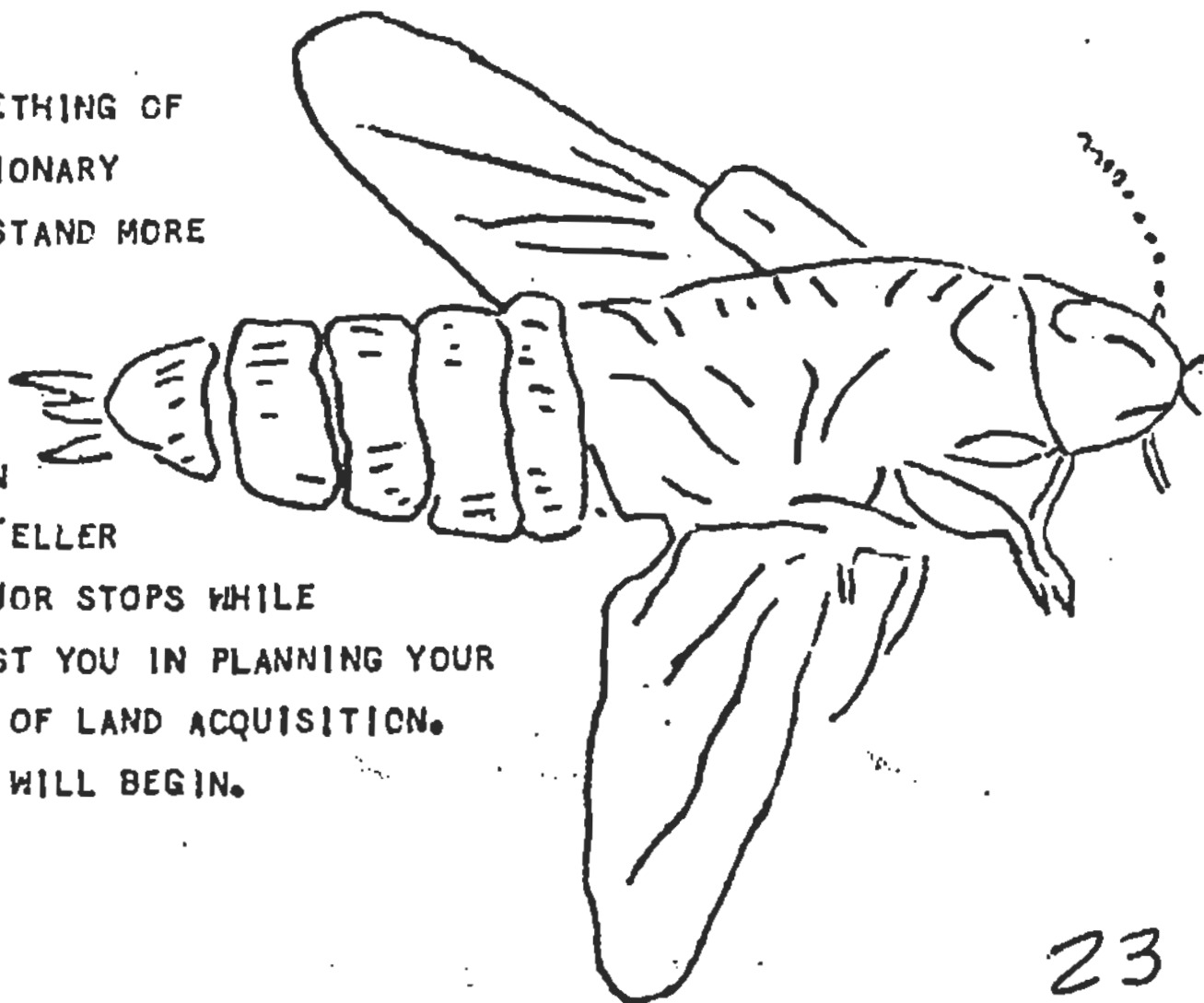
THE ACTUAL LAKE BED IS IRREGULARLY SHIELD-SHAPED AND APPROXIMATELY 12 MILES LONG BY 2 MILES WIDE. THE LAKE HAD BEEN FORMED SOME 38 MILLION YEARS AGO, WHEN ERUPTIONS FROM A VOLCANO, LOCATED NEAR GUFFEY, COLORADO, BLOCKED THE STREAM WHICH MEANDERED THROUGH THE VALLEY NEAR THE TOWN OF LAKE GEORGE, COLORADO, WITH A 40-60 FOOT DEEP MUD FLOW. INTERMITTENT VOLCANIC ACTIVITY, SPREAD OVER SOME FOUR MILLION YEARS, SENT TONS OF VOLCANIC ASH, DUST AND DEADLY GAS INTO THE AIR. AS IT CAME TO THE SURFACE, IT CARRIED INSECTS INTO THE LAKE, TRAPPED FISH SWIMMING THERE AND TORE OFF LEAVES, AND INSECTS FEEDING ON THE LEAVES, FROM THE VEGETATION ALONG THE SHORE. THIS ASH AND ITS CONTENTS SETTLED TO THE BOTTOM OF THE LAKE IN LAYER UPON LAYER. MUCH OF THE ASH WHICH FELL ON SURROUNDING LAND WAS WASHED INTO THE LAKE DURING RAINSTORMS, SETTLING THERE AS LAYERS OF SILT. THE WATER OF THE LAKE WAS SLOWLY DISPLACED BY THE ASH LAYERS AND THEN A FINAL LAVA FLOW FROM THE GUFFEY VOLCANO SPREAD OUT OVER THE SEDIMENTS AND SEALED THEM, PRESERVING THEIR CONTENTS FOR THE FUTURE.

THE AREA IS ALSO SPOTTED WITH PETRIFIED STUMPS OF SEQUOIA, A SPECIES VERY SIMILAR TO THE CALIFORNIA GIANT SEQUOIA OF TODAY. OTHER TREES REPRESENTED BY FOSSIL STUMPS AND LEAVES INCLUDE PINE, WALNUT, WILLOW, OAK, AND MAPLE. THESE FORESTS EXISTED BEFORE THE FORMATION OF THE LAKE.

THE RARE QUALITY OF THE FOSSIL BEDS LIES NOT IN DRAMATIC EXPOSURES OF BIG-BONED CREATURES, BUT RATHER IN THE DELICACY WITH WHICH THOUSANDS OF FRAGILE INSECTS, TREE FOLIAGE, AND OTHER FORMS OF LIFE HAVE BEEN PRESERVED. MANY OF THESE ARE COMPLETELY ABSENT OR EXTREMELY RARE IN MOST FOSSIL SITES OF THIS PERIOD.

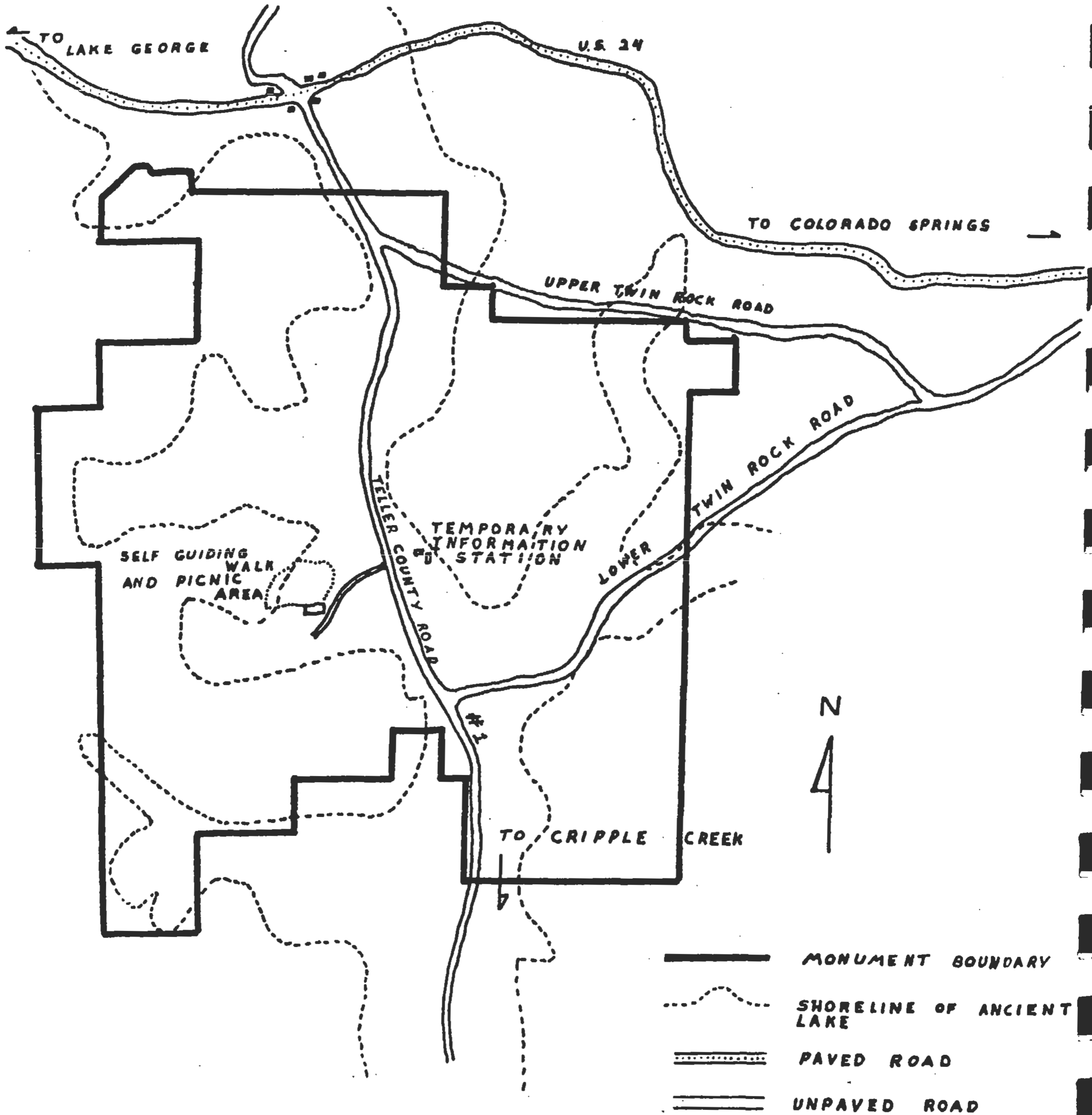
HERE THEN IS A PLACE WHERE ONE CAN SEE AND TOUCH SOMETHING OF THE EARTH'S PAST. WE CAN "READ" THE STORY OF EVOLUTIONARY CHANGES IN PLANTS AND INSECTS AND PERHAPS THUS UNDERSTAND MORE OF OUR OWN CHANGING ENVIRONMENT.

AT PRESENT THERE IS ONLY LIMITED PUBLIC ACCESS AND PHYSICAL DEVELOPMENT AT THE MONUMENT. AN INFORMATION STATION IS LOCATED TWO MILES SOUTH OF FLORISSANT ON TELLER COUNTY ROAD #1 AND WE SUGGEST THIS AS ONE OF YOUR MAJOR STOPS WHILE VISITING THE MONUMENT. THERE A PARK RANGER CAN ASSIST YOU IN PLANNING YOUR VISIT. THE FEDERAL GOVERNMENT IS IN THE FINAL STAGE OF LAND ACQUISITION. WHEN THIS IS COMPLETED, A FIVE YEAR DEVELOPMENT PLAN WILL BEGIN.





The Monument, located south of the village of Florissant which is 35 miles (56.3 kilometers) west of Colorado Springs on Rt. 24 is not yet fully developed. We suggest you stop at the Museum and Information Station 2.45 miles (3.94 kilometers) south of Florissant where a Park Ranger will assist you with your visit.



MONUMENT BOUNDARY

SHORELINE OF ANCIENT LAKE

PAVED ROAD

UNPAVED ROAD

The Monument, located south of the village of Florissant which is 35 miles (56 kilometers) west of Colorado Springs on Rt. 24 is not yet fully developed. We suggest you stop at the Museum and Information Station 2.5 miles (4 Km) south of Florissant where a park ranger will assist you with your visit.

# FLORISSANT FOSSIL BEDS NATIONAL MONUMENT

## COLORADO

### TO LAKE GEORGE

4 miles  
6.5 Km

FLORISSANT

U.S. 24

TO COLORADO SPRINGS

35 miles  
56.3 Km

UPPER TWIN ROCK ROAD

LOWER TWIN ROCK ROAD

VISITOR CENTER

SELF GUIDING WALK AND PICNIC AREA

TELLER COUNTY ROAD #1

TO CRIPPLE CREEK  
16 miles  
25.3 Km



for information contact:  
SUPERINTENDENT  
FLORISSANT FOSSIL BEDS NATIONAL MONUMENT  
BOX 185  
FLORISSANT, COLORADO 80816

24

ELEVATION: 8300 Ft. (2531.5 Meters)





# FLORISSANT FOSSIL BEDS NATIONAL MONUMENT

Hidden several feet under the earth where you stand are the famous Florissant Fossil Beds, the world's most extensive deposit of delicate, fossilized insects and leaves.

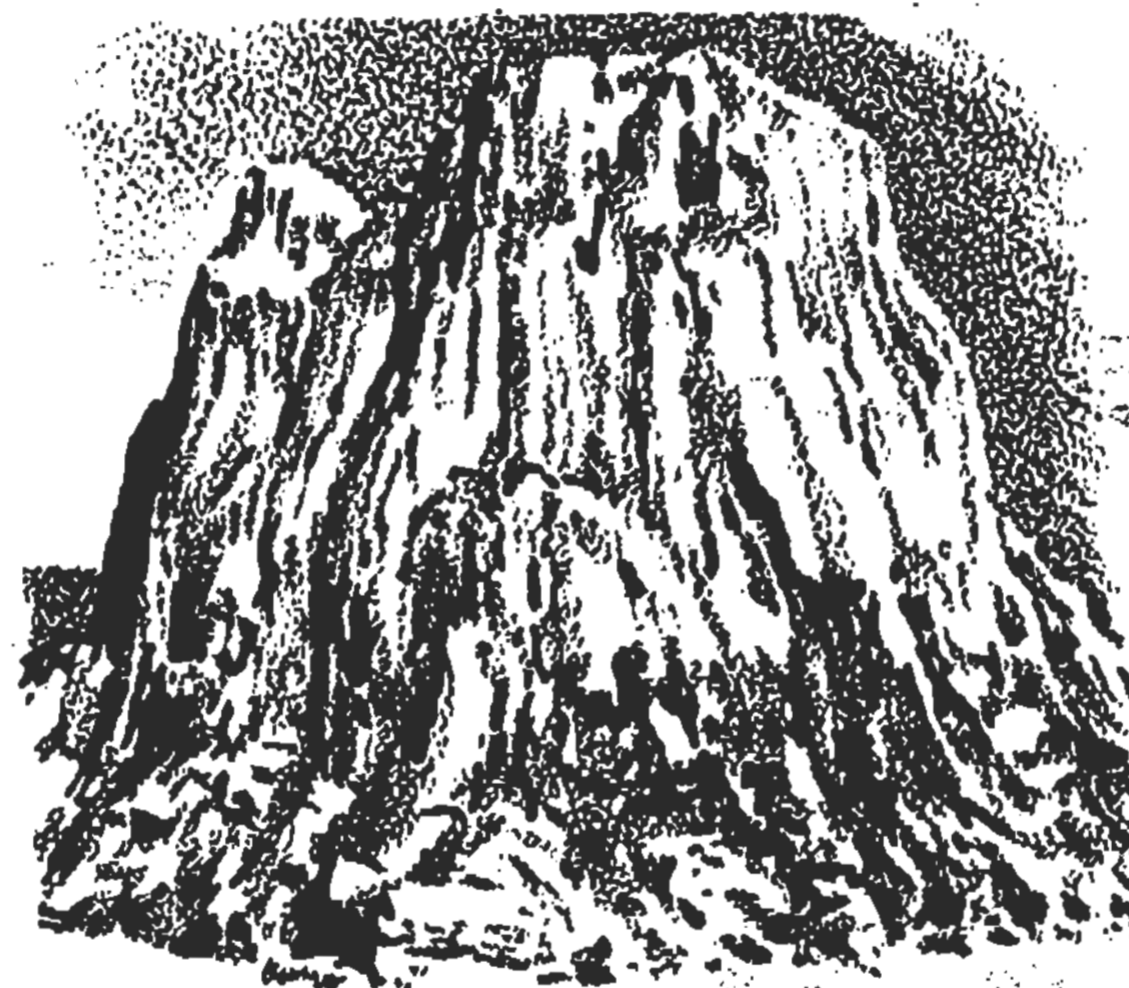
Impressions of dragon flies, beetles, ants, and butterflies and innumerable other creatures that lived here during the Oligocene Epoch, 34 to 35 million years ago, are almost perfectly preserved. Leaves from birches, willows, maples, beeches, and hickories, and needles from fir and giant sequoias are abundant. There are even palm leaves which prove that a warmer subtropical climate once prevailed here.

These fossils were created after millions of tons of ash, dust, and pumice were shot into the air during a series of volcanic eruptions over a period of ½ million years. This wind-carried material settled over ancient Lake Florissant, entrapping a vast variety of



plants and animals which fell upon the lake surface, then gently settled to the bottom. There they became fossilized, embedded in layers of ash which turned to shale, a type of rock. Like pages of a photographic album, these layers preserved an amazingly accurate record of the many plants and animals that once lived beside this ancient lake.

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 all over the world have dug into the shale and have removed 60 to 80,000 specimens, identifying over 1,100 species of insects, 114 plant species and several species of fish, birds and small mammals. In addition, several petrified tree stumps have since been excavated. One of the largest is a Sequoia stump 11 feet (3.4

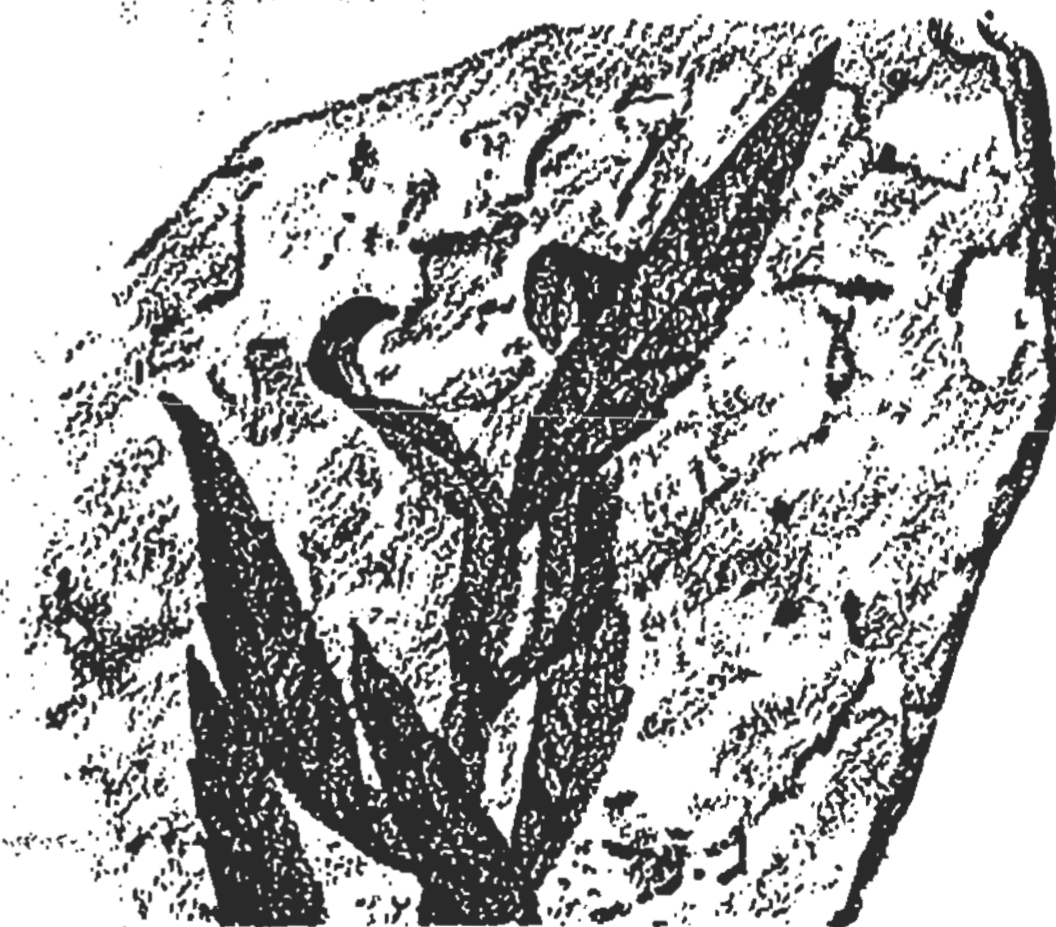


meters) high with a diameter of 10 feet (3 meters). At the time these were alive the area was about 3,000 feet (915 meters), but it is now 8,300 feet (2,532 meters) elevation. The ancient lake, which has since disappeared, was formed by a lava flow which dammed the stream, forming a sickle-shaped lake 12 miles (19 Km) long and up to 2 miles (3.2 Km) wide. Subsequent lava and mud flows from the ancient volcanoes covered many trees on the lakeshore, and covered the shale beds with a hard crust of rock which preserved the forming shales for millions of years.

The present day National Monument is an area of rolling hills and ridges covered with ponderosa pine,

Douglas fir, Colorado blue spruce and aspen. Surrounding grassland meadows have abundant wildflowers including Indian paintbrush, loco, senecio, blue flax, wild iris, shooting stars and columbines. Squirrels, prairie dogs, coyotes, badgers, rabbits, porcupines, mule deer and occasionally elk are seen. Bluebirds, warblers, nuthatches, mountain chickadees and a resident pair of golden eagles are enjoyed by visitors to the Monument.

At the museum visitors to Florissant Fossil Beds National Monument, authorized by Congress in 1969, may see examples of these fossils and may ask a park ranger to help them plan their visit to the area. The picnic area and nature trail are shown on the map, but there are no overnight facilities. Motels and campgrounds are located in nearby towns and in Pike National Forest.



The name "florissant" is from a French word meaning "flowering" or "blooming." This valley of abundant wild flowers was named by an early settler in 1870. Visitors frequently confuse the word "florissant" with "fluorescent" and mistakenly expect to see fossils that glow in the dark.



### 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 (1/2 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 pant-legs inside your socks and check yourself for ticks periodically. If you have any imbedded ticks, check with a ranger or physician.

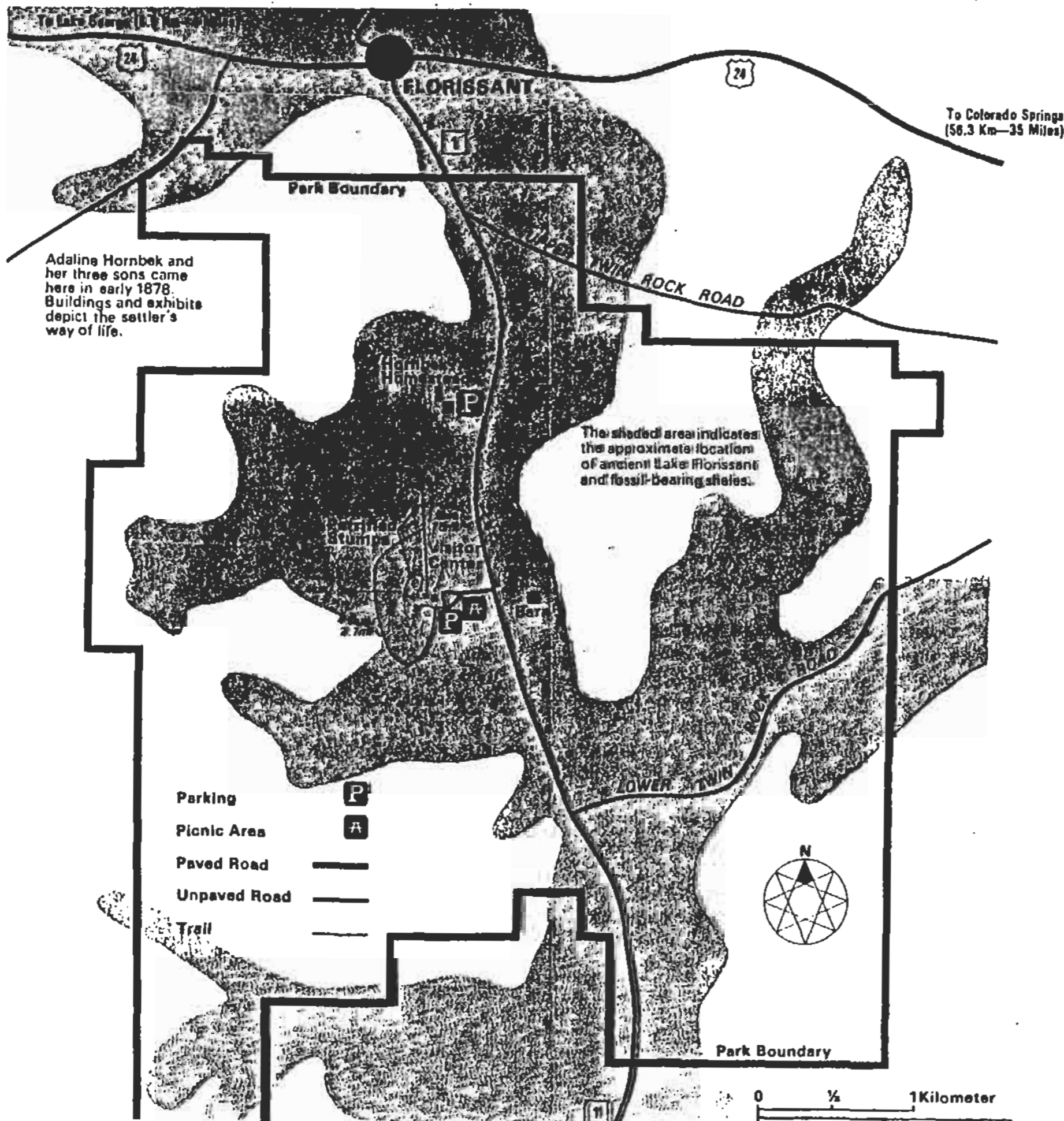
### Regulations

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.

# florissant fossil beds

GPO 1960-702-097/00000



### 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.





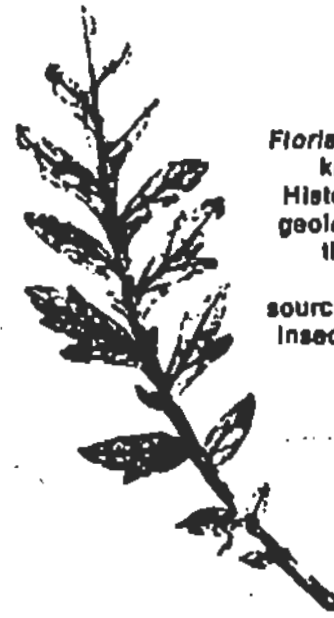
### An Ancient Calligraphy

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.

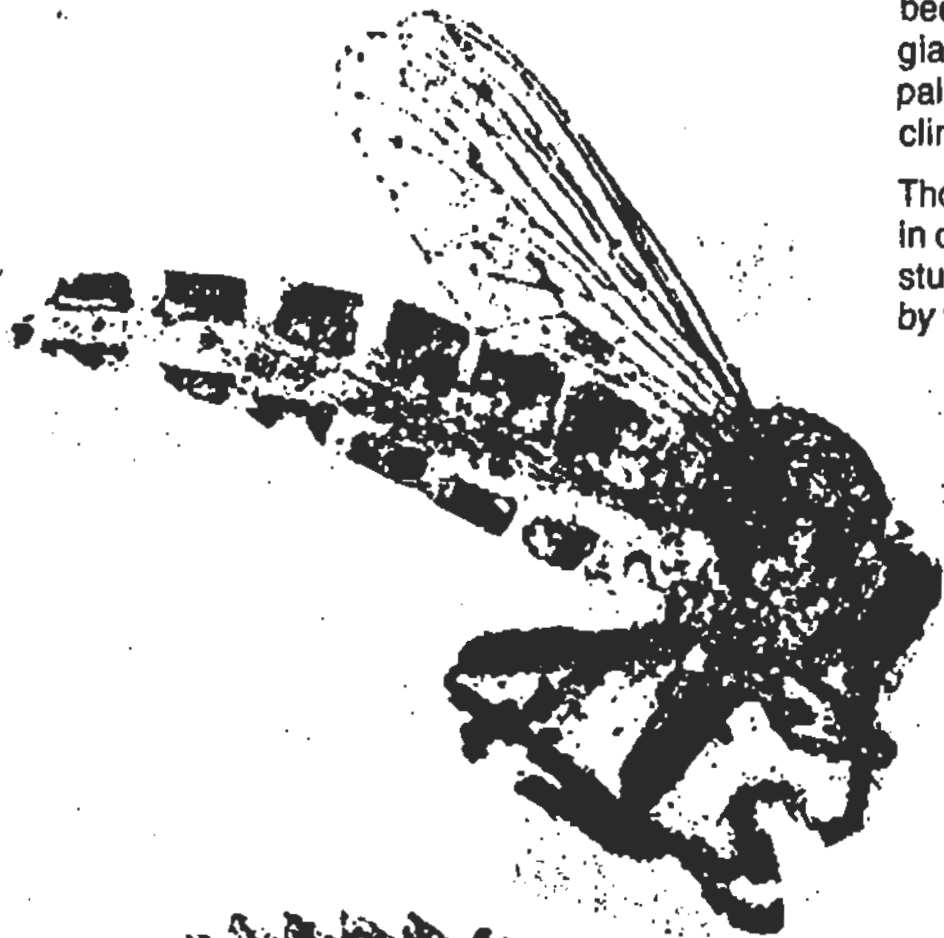
Impressions of dragonflies, beetles, ants, butterflies, spiders, fish, some mammals and birds, and innumerable insects that lived here 34 to 35 million years ago are almost perfectly preserved. Fossil leaves from birches, willows, maples, beeches, and hickories, and needles from fir and giant sequoia 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.



### 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,

### 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.

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.







Adeline Hornbek is an outstanding example of early Colorado settlers and was the first to homestead on the land that is now within Florissant Fossil Beds National Monument. She was very successful in dealing with the rigors of pioneer life. Physically she was impressive as well. At about 5'7" she was quite tall for a woman in the 1800's and had striking red hair. In her lifetime she had three husbands, four children and lived among two different Indian tribes.

Born Adeline Warfield in Massachusetts, July 1833, she first married at the age of 25. Her husband Simon A. Harker was an Indian trader/merchant in business with Adeline's brother Alexander in the Creek territory (present day Oklahoma). Simon, then 33, had immigrated from England twenty years earlier. A son, Frank, was born the next year on Nov. 3, 1859 and 10 months later daughter Annie arrived.

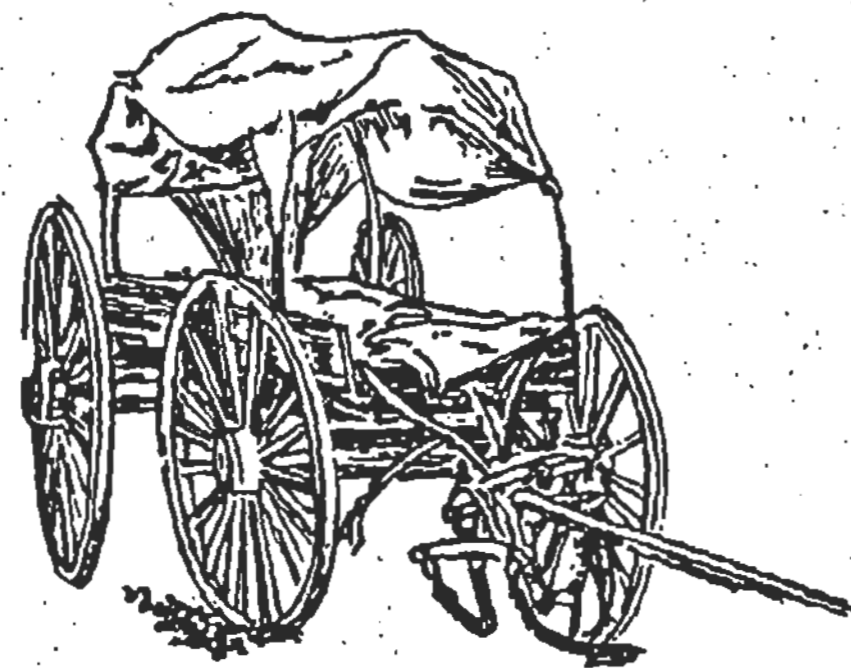
Simon wrote that in July, 1860, "I exposed myself too much when buying cattle and am afraid I have injured my constitution." This long lasting illness may be one reason that the young family left the Creek Agency and traveled to the arid West by wagon in the summer of 1861. Perhaps their trip was motivated by concern over the Civil War. The Harkers settled beside the South Platte River just northeast of the new Denver City. Here they farmed and raised cattle.

In September of 1863 Adeline's second son, George, was born. At the nearby Golden City land office Simon filed a claim on the 160 acres under President Lincoln's Homestead Act of 1862.

The next year was one of tragedy for the Harkers. During the famous flood of 1864 they suffered extensive losses and Simon, 39, died soon after. Adeline was left with three small children ages one, four and five.

It appears that she managed very well and bought 80 acres of their claim outright in July of 1866 for \$100 cash, two years before the final proof was due. Two months later she married Elliot Hornbek in Denver.\*

There is an air of mystery surrounding Mr. Hornbek and he disappeared from the scene in 1875 after fathering Elliot Jr., born about 1870. His occupation and why he abandoned his family is unknown, perhaps Adeline left him. One report places Mrs. Hornbeck and her four children in the Colorado Springs region as early as 1872. Whichever the case, separation was rare in this era.



#### THE FLORISSANT YEARS

By early spring of 1878 Adeline Hornbek, at 44, as sole supporter of her family, had built a fine ranch in the Florissant valley. From the details of her homestead application she appears unique in four respects. First, she was a woman with four children (Frank 18, Annie 17, George 14 and Elliot 7). Secondly, she was the first person to file on land that would become part of Florissant Fossil Beds National Monument. She was financially well off, presumably due to land transactions around Denver. And lastly, the home she had built was uncommonly large.

\*Adeline Harker took advantage of a clause in the homestead legislation that allowed the homesteader to purchase the land after six months residence for \$1.25/acre.

In selecting her homestead site there was much to consider. From her years with the Creek Indians, the Utes of Florissant probably caused her no alarm. The Castello trading post two miles north offered neighbors and supplies. Abundant grass, fertile bottom-land soil, nearby timber and water completed the ideal setting.

When describing her house and the improvements that first year, Mrs. Hornbek stated that there was "a Log House 1½ story, 3 rooms upstairs - 3 rooms downstairs ... shingle roof, eleven windows ... A good Milk House. Chicken House. A large corral - has sheds on two sides. Stables for 9 horses. Has wagon shed attached. Whole interest in ¼ mile Ditch and one half interest ½ mile Ditch." Her root cellar was in the nearby hill. She placed the value of the ranch in 1878 at \$1200. Of her 160 acres Adeline began by cultivating 3 acres, raising potatoes and garden vegetables, and cutting 20 tons of hay Quite an impressive start!

Adeline had interest outside the ranch which son Frank helped manage. In 1880 she served as secretary on the Florissant School Board and in 1883 she worked in a general store in Florissant.

As further evidence of this pioneer woman's skill and ambition, by 1885 (the year she filed her final homestead papers) Adeline Hornbek had increased the value of her property by almost five times. Her livestock included "21 horses, 4 milk cows, 100 other cows (probably Texas longhorn/Hereford cross) 3 swine and 50 poultry." Her son-in-law Leon Marcott wrote of her intentions in acquiring land under the Homestead Act, "No one could have acted in better faith."

Local tradition tells that the prosperous Mrs. Hornbek traveled frequently in the United States and Europe. At age 66, Adeline was married to Frederick Stickel, a German immigrant who is said to have worked for her.

On June 27, 1905, Adeline Warfield Harker Hornbek Stickel, age 71, died of "paralysis", which today might be called a stroke. She left a legacy for future generations to marvel at and had lived 27 years on her mountain valley ranch.

#### WOMEN AND THE HOMESTEAD ACT

In an effort to populate the West and ease the crowding in the East, President Abraham Lincoln offered free public land to settlers with the passage of the Homestead Act of May 20, 1862. The homesteader was required to be a loyal U.S. citizen (or declare intent to become a citizen), head of a family and over twenty-one years of age. Continuous residence on and improvement of the land was necessary for five years, at which time the final proof could be made. The registration fee was usually \$14. Any man or woman who met these requirements could gain title to 160 acres of land.

Now, for the first time in American history, working-class women had access to land ownership, because the land was free. Since land ownership is linked to economic power in American society, homesteading women emerged as a hidden force on the agricultural frontier.

#### ABOUT THE HORNBEK HOMESTEAD BUILDINGS

The main house is the only remaining original structure from Adeline Hornbek's Homestead. Succeeding landowners tore down or replaced the outbuildings. Historic buildings located elsewhere on the Monument were moved in to represent the lost bunkhouse, carriage shed and barn. Her root cellar had caved in by the time the United States government bought the property in 1973. When the National Park Service began restoration of the Homestead in 1976, the root cellar was rebuilt following the 1878 design and dimensions. Some of the authentic timbers can be seen in the walls.

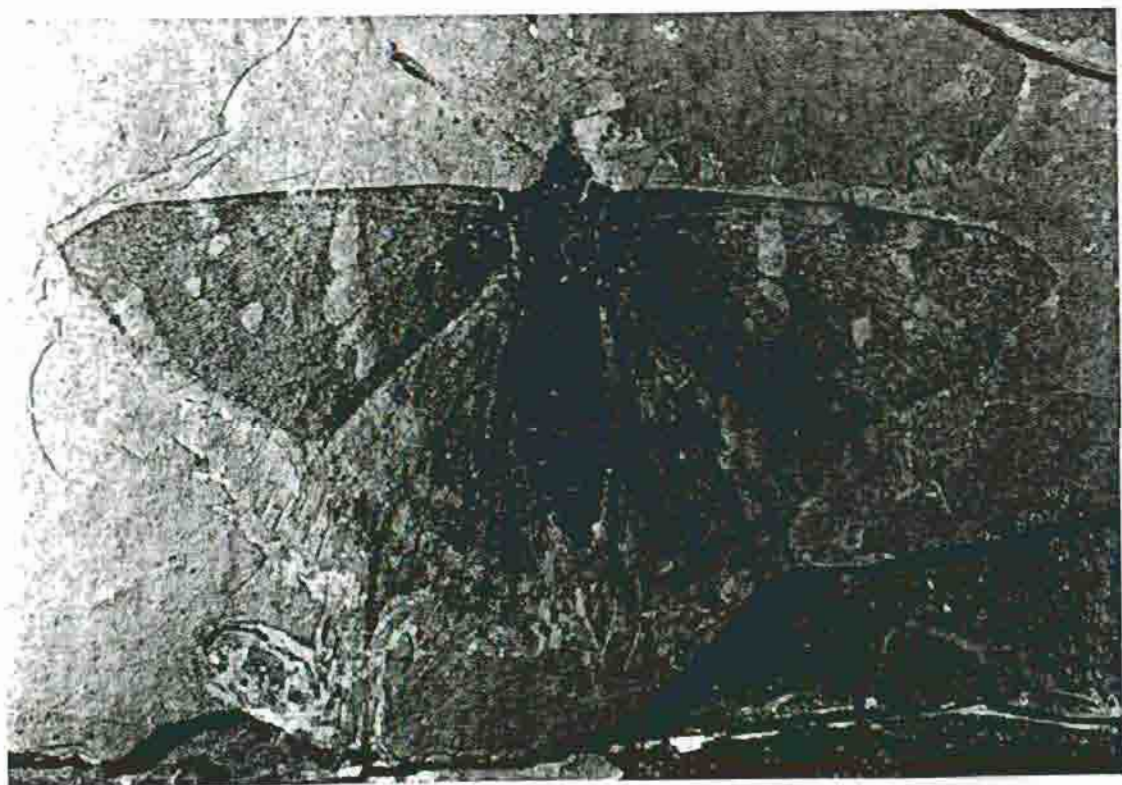
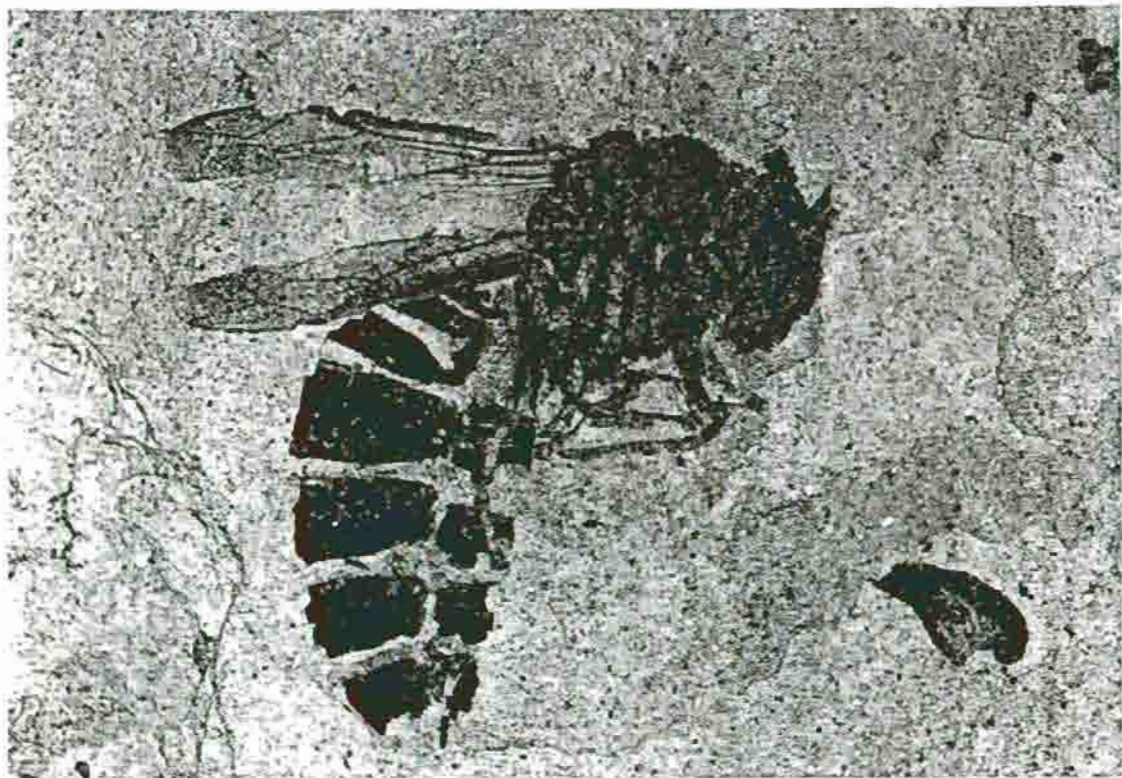
















During the summer of 1995, seasonal ranger Beth Simmons discovered in the Princeton files in the FLFO archives, a photograph taken by Samuel Scudder's son of the Florissant Valley in 1881. The photo appears to have been taken looking south toward the hill west of the Big Stump. Scudder wrote a note, apparently to Arnold Guyot of Princeton, indicating that the site of his excavation was at the west end of the hill. The picture is significant for 2 reasons. First, it is directly associated with Scudder, one of the first and most noted paleontologists to visit Florissant. Second, it is the only 19th century photograph of the Florissant Valley that can be dated exactly as to the year it was taken.

The original photo is fading. However, there is a good black and white copy made in 1983 by the son of Donald Baird, the curator of the Princeton Museum of Natural History.

A short note written above the photo by Arnold Guyot states, "Colline de Florissant [hill at Florissant], Sth [South] Park, Colorado."

A typed note with the photo indicates that it was from the inside front cover of a copy of Scudder's "Tertiary Insects of North America."



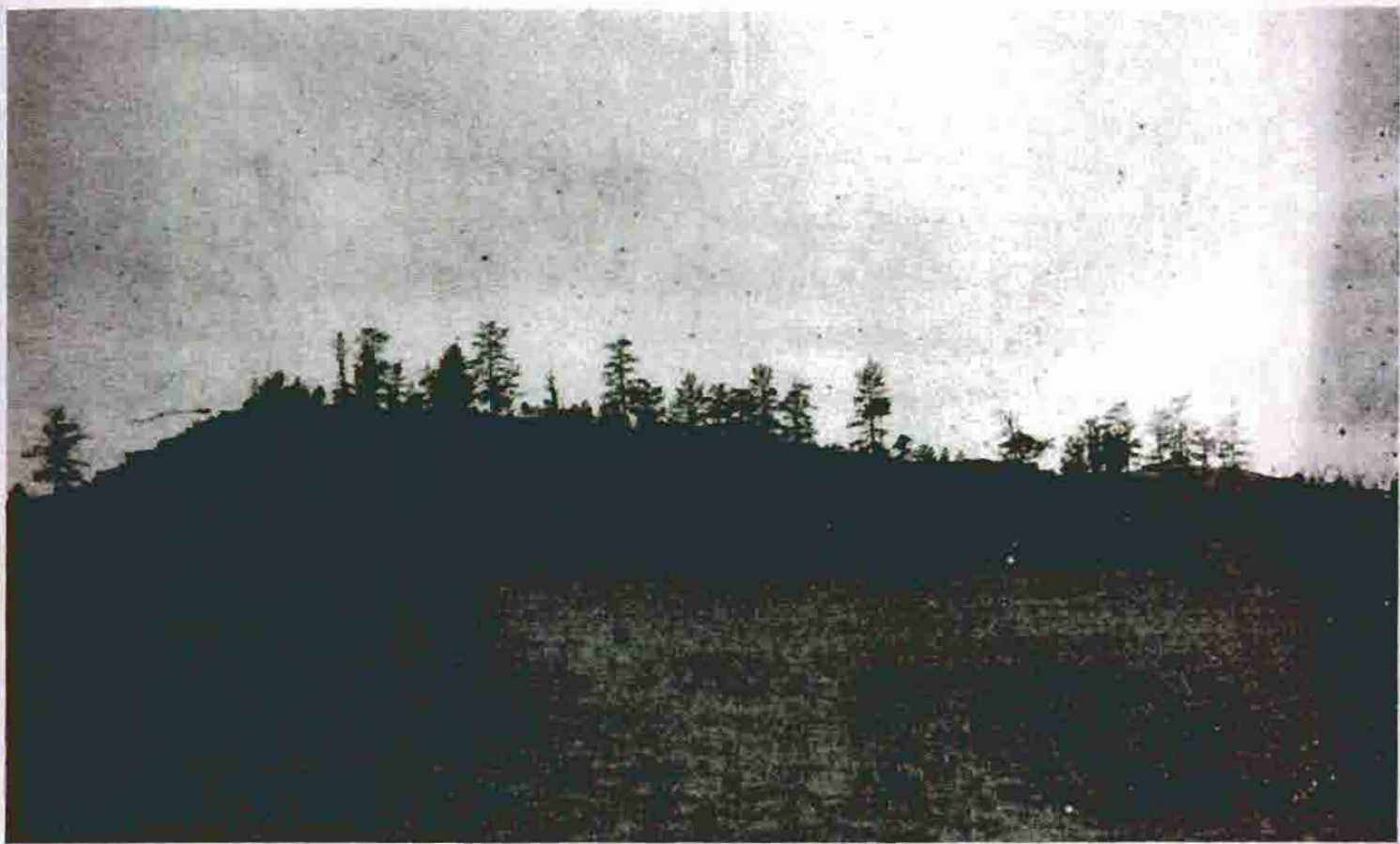


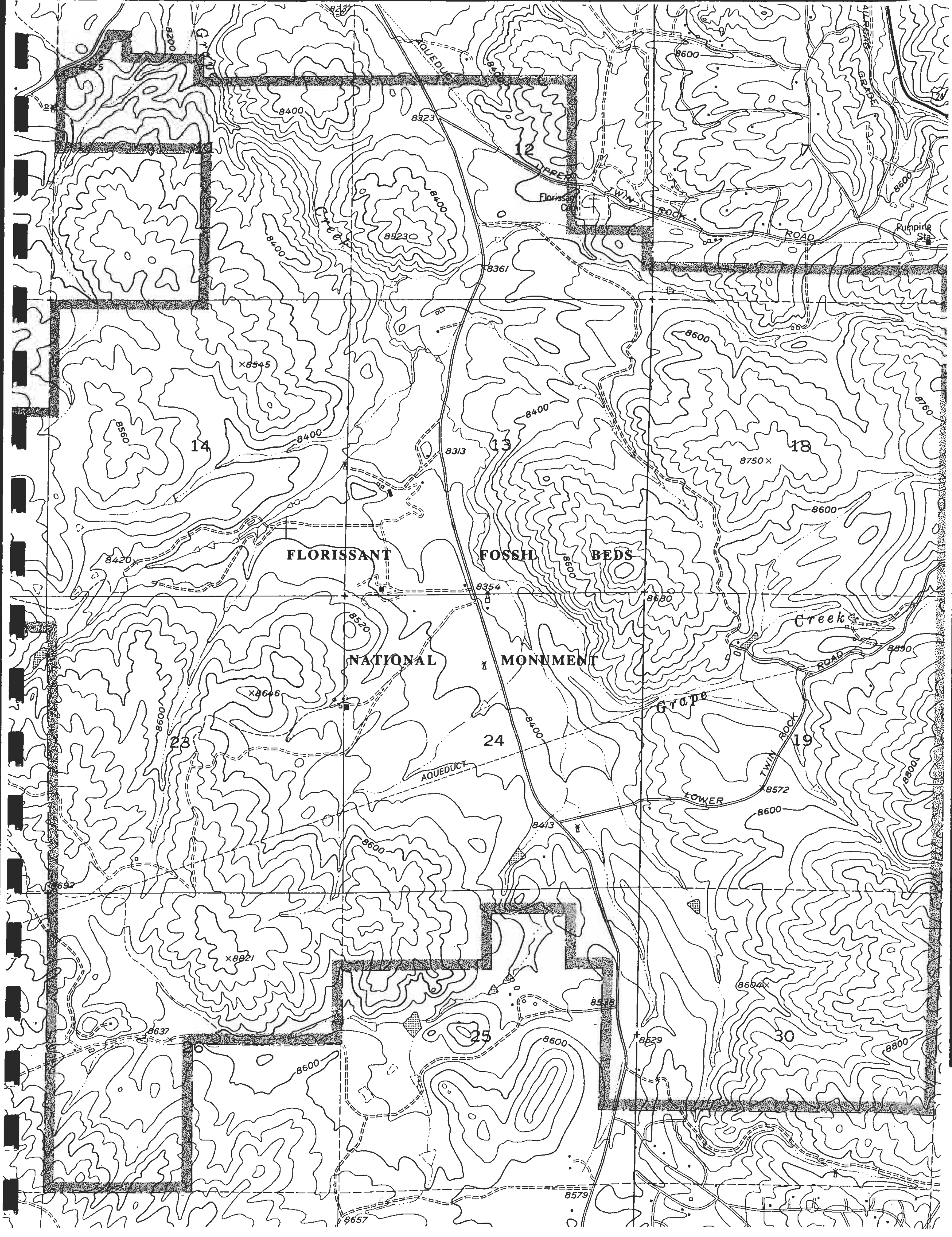
I send you herewith a photograph taken by my boy  
(then 12 years old) last year in Colorado. It  
represents the hill at Florissant where most of  
the insect specimens were obtained. The right hand  
end is where my section was made and where your  
Princeton party worked.

yours very sincerely  
Samuel H. Scudder

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GRAND

AQUEDUC

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12

Florissant Creek

TWIN ROCK

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Pumping Sta

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FLORISSANT

FOSSIL BEDS

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NATIONAL

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