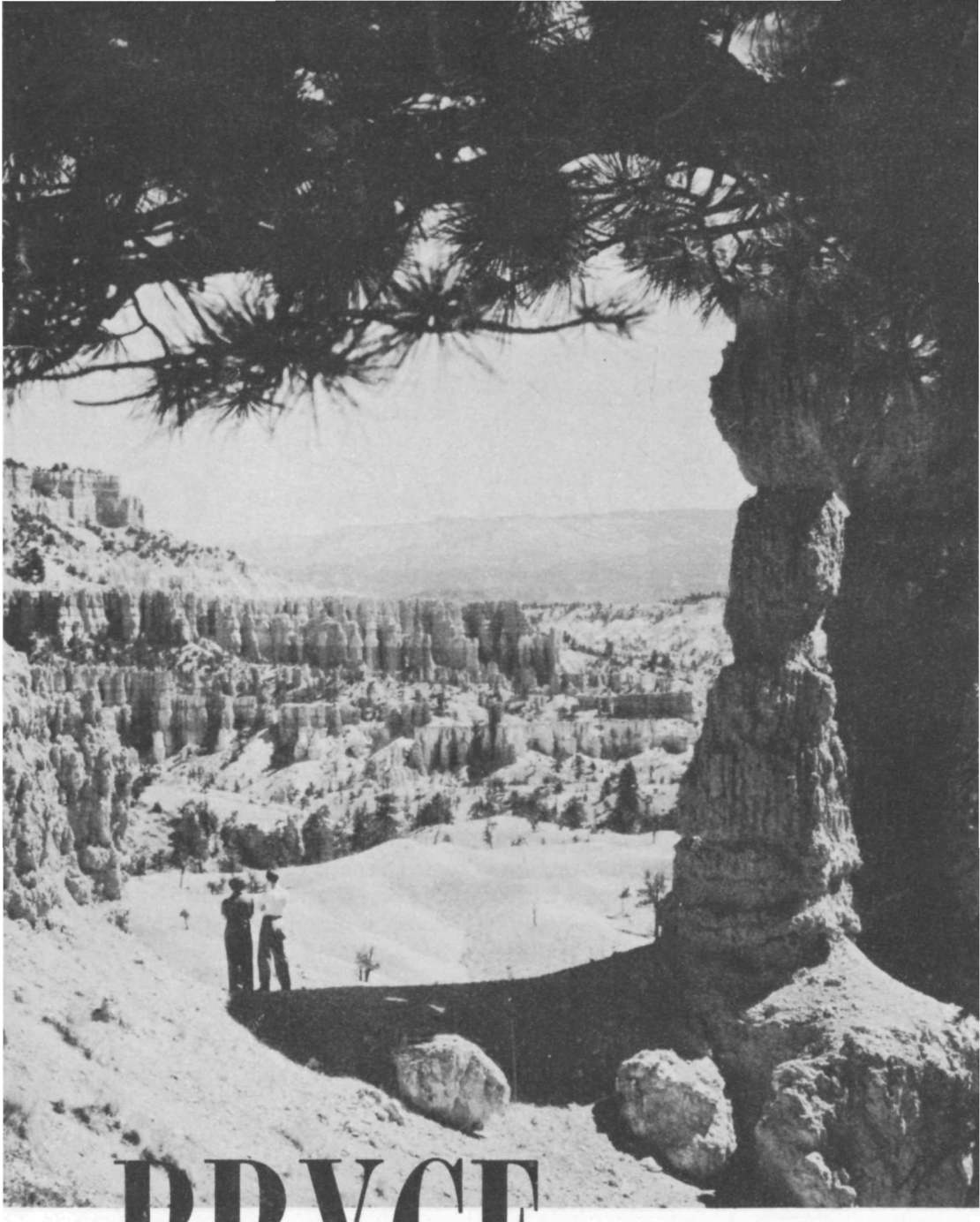


BRYCE CANYON

NATIONAL PARK AND CEDAR

BREAKS NATIONAL MONUMENT • UTAH

Contents

Historic Events

1866 Capt. James Andrus in command of a military expedition from St. George, Utah, crossed the Paria River a few miles south of Bryce Canyon.

1872 A. H. Thompson, geographer of the Powell Survey, sketched the topography of the Pink Cliffs eastward to Rainbow Point and ascended Table Cliffs. Lt. W. L. Marshall, topographer, and G. K. Gilbert and E. E. Howell of the Wheeler Survey mapped, described, and illustrated for the first time the features of the park north of Campbell Canyon.

1874–76 Scattered settlements established in the Upper Paria Valley. Ebenezer Bryce, for whom the park is named, ranged cattle in the area. The region that includes Bryce Canyon National Park studied by Capt. C. E. Dutton. View from Sunset Point described (1876) by T. C. Bailey, Deputy U. S. Surveyor.

1877 Cannonville and Henrieville founded.

1905 The Paunsaugunt Plateau, which includes the park, set aside as Powell National Forest.

1923 Bryce Canyon National Monument established by Presidential proclamation.

1924 Act of Congress authorized the establishment of Utah National Park, subject to extinguishment of private land titles.

1928 Name changed from Utah National Park to Bryce Canyon National Park; park established.

UNITED STATES DEPARTMENT OF THE INTERIOR . . . . . Douglas McKay, *Secretary*

NATIONAL PARK SERVICE . . . Conrad L. Wirth, *Director*

Bryce Canyon

NATIONAL PARK

BRYCE CANYON NATIONAL PARK includes some of the most interesting exposures of the Pink Cliffs formation, whose rocks are among the most colorful of any forming the earth's crust. The major beauty spots of the area are found where forces of erosion have cut back into the plateau, forming amphitheaters or wide canyons filled with pinnacles and grotesque forms.

Most of the park area, with some 30 miles of Pink Cliffs, can be seen from Rainbow Point, at the southern end of the park. Included in this panorama are such beautiful amphitheaters as Black Birch Canyon, Agua Canyon, and Willis Creek. In addition, there are magnificent views across "the land of the purple sage" to Navajo Mountain, 80 miles to the east, and to the Kaibab Plateau and the Trumbull Mountains to the south, the latter 99 miles distant.

In reality Bryce is not a canyon; rather it is a great horseshoe-shaped bowl or amphitheater cut by water erosion into the Paunsaugunt Plateau and extending down a thousand feet through its pink and white marly limestone. The character of the area is well indicated by the Paiute Indian name, "Unka-timpe-wa-wince-pock-ich," which is translated as, "red rocks standing like men in a bowl-shaped canyon." The largest amphitheater is 3 miles long and about 2 miles wide, and is filled with myriads of fantastic figures cut by weathering influences. Its domes, spires, and temples are decorated in all the colors of the spectrum.

The area was reserved as Bryce Canyon National Monument by Presidential proclamation, June 8, 1923. The act of June 7, 1924, authorized its establishment as Utah National Park when certain conditions regarding land acquisition had been met. The act of February 25, 1928, changed the name from Utah National Park to Bryce Canyon National Park and materially increased the size of the area. On September 15, 1928, when all alienated lands within the proposed park area were transferred to the United States, in accordance with the act of June 7, 1924, Bryce Canyon National Park was established. The park now embraces more than 36,000 acres under Federal ownership.

Bryce Canyon National Park is one

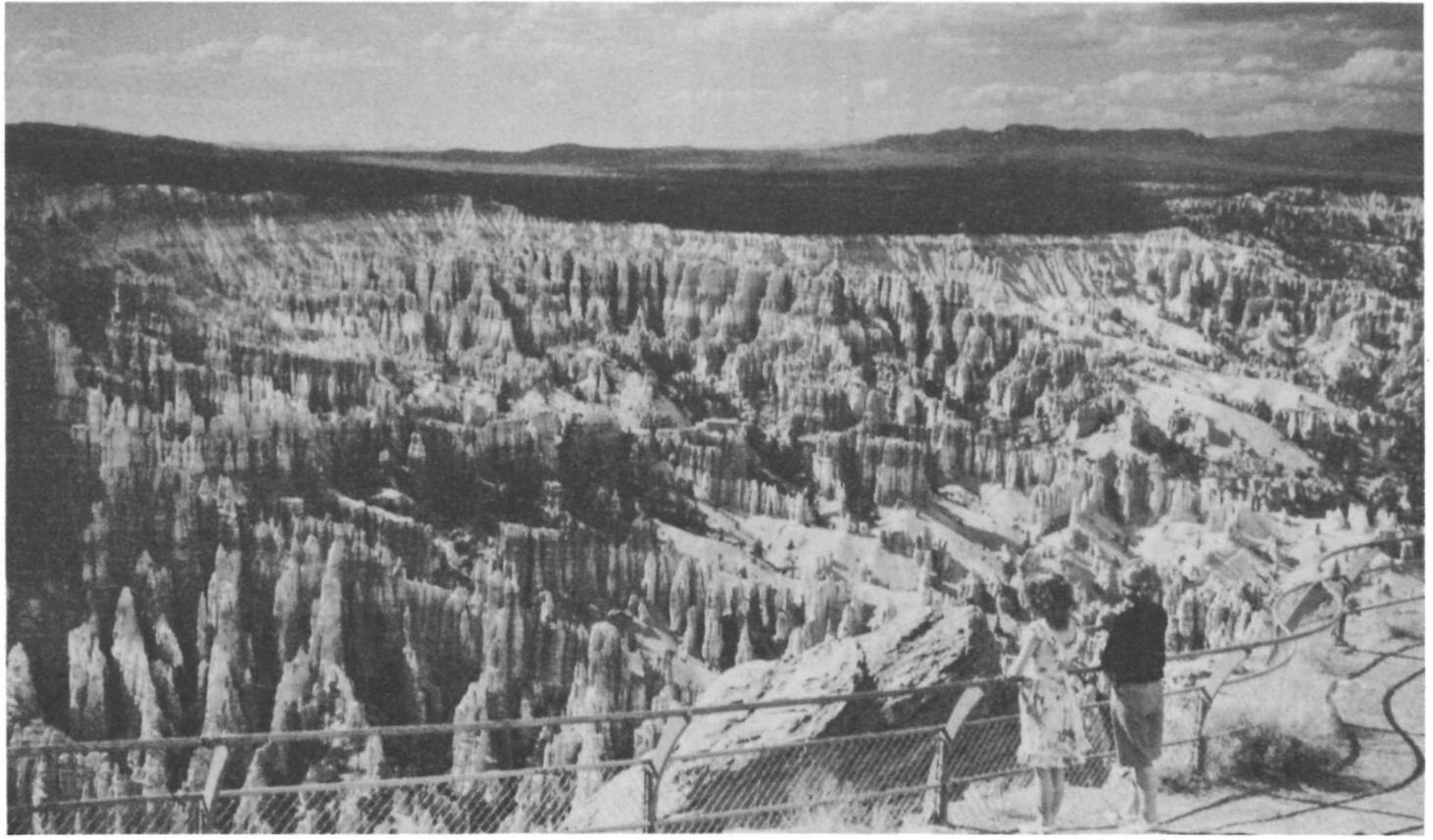
of the areas of the National Park System owned by the people of the United States and administered for them by the National Park Service, Department of the Interior. In these areas the scenery and the objects of historic, prehistoric, and scientific interest are carefully preserved and displayed for public enjoyment.

Geology of Bryce Canyon National Park[1]

Regional Features.—In Zion and Bryce Canyon National Parks the type of scenery peculiar to the plateaus of southern Utah and northern Arizona attains its most complete expression. Layer upon layer of shales and sandstones have been carved into architectural forms, astonishingly alike for size and color. The long stretches of even skyline seen on approaching the parks from Cedar City (west), Panguitch (north), and Grand Canyon (south) give an impression of extensive flat surfaces that terminate in lines of cliffs, but viewpoints within the parks reveal a ruggedness possessed by few other regions. The canyons are so narrow, so deep, and so thickly interlaced, and the edges of the strata so continuously exposed that the region seems made up of gorges, cliffs, and mesas intimately associated with a marvelous variety of minor erosion forms. The parks might be considered as mountainous regions in which departures of many thousand feet from a general surface are downward rather than upward.

The canyons and adjoining terraces are spectacular illustrations of erosion. They show with diagrammatic clearness the work of running water, rain, frost, and wind, of ground water and chemical agencies active throughout a long period of time. The horizontal tables and benches, broken by vertical lines that in distant view appear to dominate the landscape, are normal features of erosion of plateau lands in an arid climate. The tabular forms are the edges and surfaces of hard strata from which softer layers have been stripped. The vertical lines mark the position of fractures (joints)—lines of weakness which erosion enlarges into grooves and miniature canyons. As they entrench themselves in horizontal layers of rock that vary in resistance to erosion, the master streams and their tributaries are developing stairlike profiles on their enclosing walls. Cliffs in resistant rocks and slopes in weak rock constitute risers and treads that vary in steepness and height with the thickness of the strata involved. Thus near the south entrance to Zion Park the edge of a layer of hard conglomerate is a vertical cliff, its top a platform. Above this platform a long slope of shale, broken by many benches developed in hard beds, extends upward to the great cliff faces of West Temple and the Watchman. In front of Zion Lodge a slope of weak shales leads upward to a cliff of resistant sandstone above which a slope of shale extends to the vertical wall of Lady Mountain. In Bryce Canyon the rim road is on the highest tread of a giant rock stairway that, as viewed from Rainbow Point, leads downward in steps 30 to 400 feet high to the flat lands 3,000 feet below.

[1]Condensed from "A Geologic and Geographic Sketch of Bryce Canyon National Park" by Herbert E. Gregory.

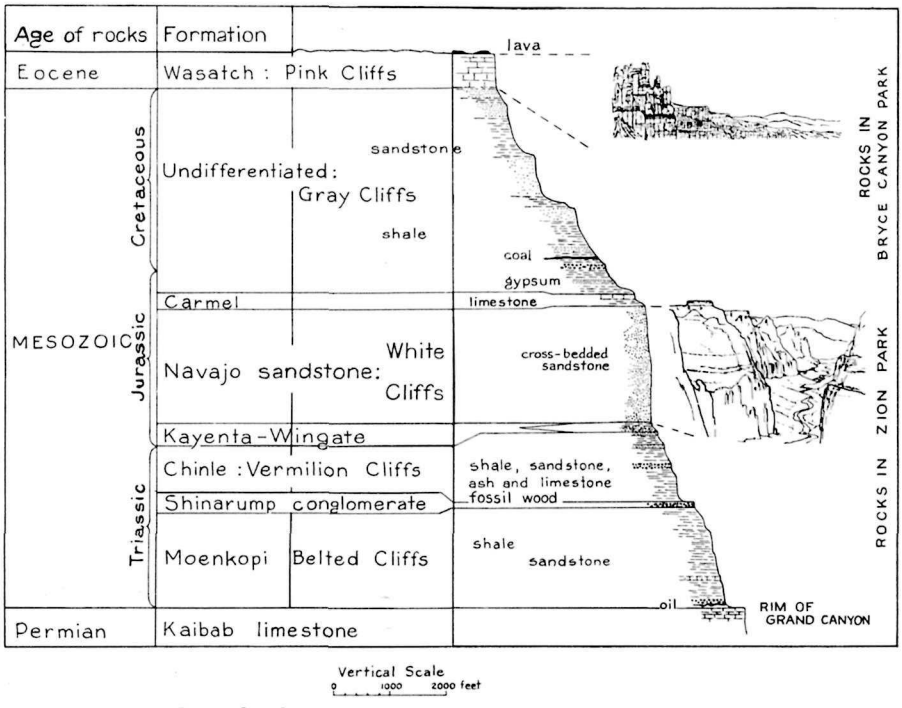


View of multicolored formations from Bryce Point (*Union Pacific Railroad photo*)

The streams at work in the parks, though relatively small, have steep gradients, including rapids and waterfalls, and are supplied with disintegrated rock material swept from the ledges by torrential rains about as fast as formed. They are therefore powerful agents of erosion, especially in times of flood. The fresh, sharp, angular profile of mesas, ridges, and canyon walls and the extensive areas of bare rock are maintained by the rapid down-cutting and prompt removal of rock waste. The resulting land forms reflect the aridity and the topographic youth of southern Utah and contrast strongly with the rounded hills, broad valleys, plant-covered slopes, and deep soils of more humid regions.

Geologic History.—A large part of geologic history is revealed in the canyon walls of Zion and Bryce Canyon National Parks. Just as Grand Canyon is the best known record of ancient geologic history, Zion Canyon records most clearly the events of medieval geological time, and Bryce reveals much of modern geologic history. The story of Zion begins where that of Grand Canyon ends, and ends where Bryce begins. The rocks exposed in these three national parks incorporate the records of a billion years.

A study of the rocks of Zion and Bryce Canyon shows that during the last 200,000,000 years the region comprising the parks has witnessed many changes in landscape and climate. At times it was covered by the sea, at other times broad rivers traversed its surface, and at still other times it was swept by desert winds. Most of the rocks were laid down by water as gravel, sand, mud, and limy ooze.



Generalized section of sediments in Zion and Bryce Canyons

They have been converted into solid rock by the weight of layers above them and by lime, silica, and the iron that cement their grains. Embedded in the rocks are fossil sea shells, fish, trees, snails, and the bones and tracks of land animals that sought their food on flood plains, in forests, or among sand dunes. The most conspicuous remains are those of dinosaurs—huge reptiles that so dominated the life of their time that the Mesozoic is known as the "age of dinosaurs."

The accumulation of some 8,000 feet of strata (Mesozoic and Tertiary) on top of 4,000 feet of older (Paleozoic) beds, which are exposed in Grand Canyon, may be considered the first of three major events in the development of the marvelous landscapes of the Zion-Bryce region; it provided the material from which the huge scenic features were later carved. The second event was a regional uplift which elevated the previously low-lying top beds of the series (Wasatch, Pink Cliffs) to a height of nearly 2 miles above sea level. As a result of this movement, the earth's crust was broken into huge rectangular blocks by north-south fractures or faults. Three of these great faults can be seen in the vicinity of the parks: the Hurricane fault in the Hurricane Cliffs, west of Zion; the Paunsaugunt fault in the cliffs of Bryce; and the Sevier fault along the Mount Carmel Road between the two parks.

In consequence of the uplift the third major event, the present cycle of erosion, was initiated. The streams became strong and swift and so were able to cut deeply into the underlying rock and carry away the land waste. In this process the streams have removed many cubic miles of rocks, which, if replaced, would fill the present canyons and build up their bordering land to the level of the lofty Markagunt and Paunsaugunt Plateaus. The gigantic features of Zion and Bryce Canyon National Parks mark a stage in the process of erosion that began long ago and which, if continued without interruption, will convert the present rugged landscape into plains near sea level.

Distinctive Features of Bryce Canyon. — In its regional setting Bryce Canyon National Park is the southeastern border of the extensive Paunsaugunt Plateau. It comprises two areas of strongly contrasted topography that meet in a line that marks the rim of the plateau and the top of its bordering cliffs. Back from the rim the plateau surface on which the park buildings and the automobile roads have been constructed is generally flat land traversed by broad, shallow valleys in which erosion is inconspicuous. Below the rim erosion has produced a region of remarkable ruggedness. It might naturally be supposed that the beautiful amphitheater at the head of Bryce Canyon had been carved by waters pouring down from the plateau above. But the plateau streams contribute nothing; they flow away from the rim. The chief sculpturing agents are the rain and snow that fall directly into the canyon. In producing the amazing variety of erosion features the streams have been aided by frost that pries fragments from the cliffs and by chemical agencies that decompose the rock and supply its vivid color.

The development of the park landscape was made possible by move-

ments within the earth's crust which brought originally low-lying strata to an altitude exceeding 8,000 feet. Streamways on the flat top of this uplifted block were little affected, but with greatly steepened gradients the streams around the borders of the newly made plateau became powerful. The Paria and its swiftly flowing tributaries have cut deeply into the face of the Paunsaugunt and carried billions of tons of ground-up rock to the Colorado. At the present time erosion by Bryce Creek, Yellow Creek, Willis Creek, Podunk Creek, and many smaller streams, is causing the plateau face to retreat northwestward, and these streams are taking into their drainage areas channels that formerly carried waters northward to Sevier River.

The drab-colored landscape along the southeast border of the park has been developed in alternating beds of shale, coal, and sandstone (Cretaceous age); in the resulting erosion forms, slopes, mounds, rounded ridges, and valleys with inclined or steplike sides predominate. The brightly colored rocks that form the topmost cliffs and terminate abruptly in such headlands as Steamboat Mountain, Bryce Point, and Rainbow Point are resistant limestones of Tertiary age (Wasatch formation). They erode as vertical walls (Pink Cliffs), which weathering has developed into the astonishing display of architectural forms that make Bryce Canyon distinctive.

How to Reach the Park

In going to Bryce Canyon National Park the motorist turns east from the main highway, U S 89, 7 miles south of the town of Panguitch, Utah. From that junction it is 25 miles to the park. This road follows Red Canyon, a brilliantly colored little gorge which is often mistaken for Bryce Canyon itself. The approach to Bryce is unusual; no evidence of the canyon is visible until the visitor walks to the rim and suddenly has revealed to him the great sight in all its breath-taking beauty. Improved highways make Bryce Canyon National Park easily accessible except during the winter.

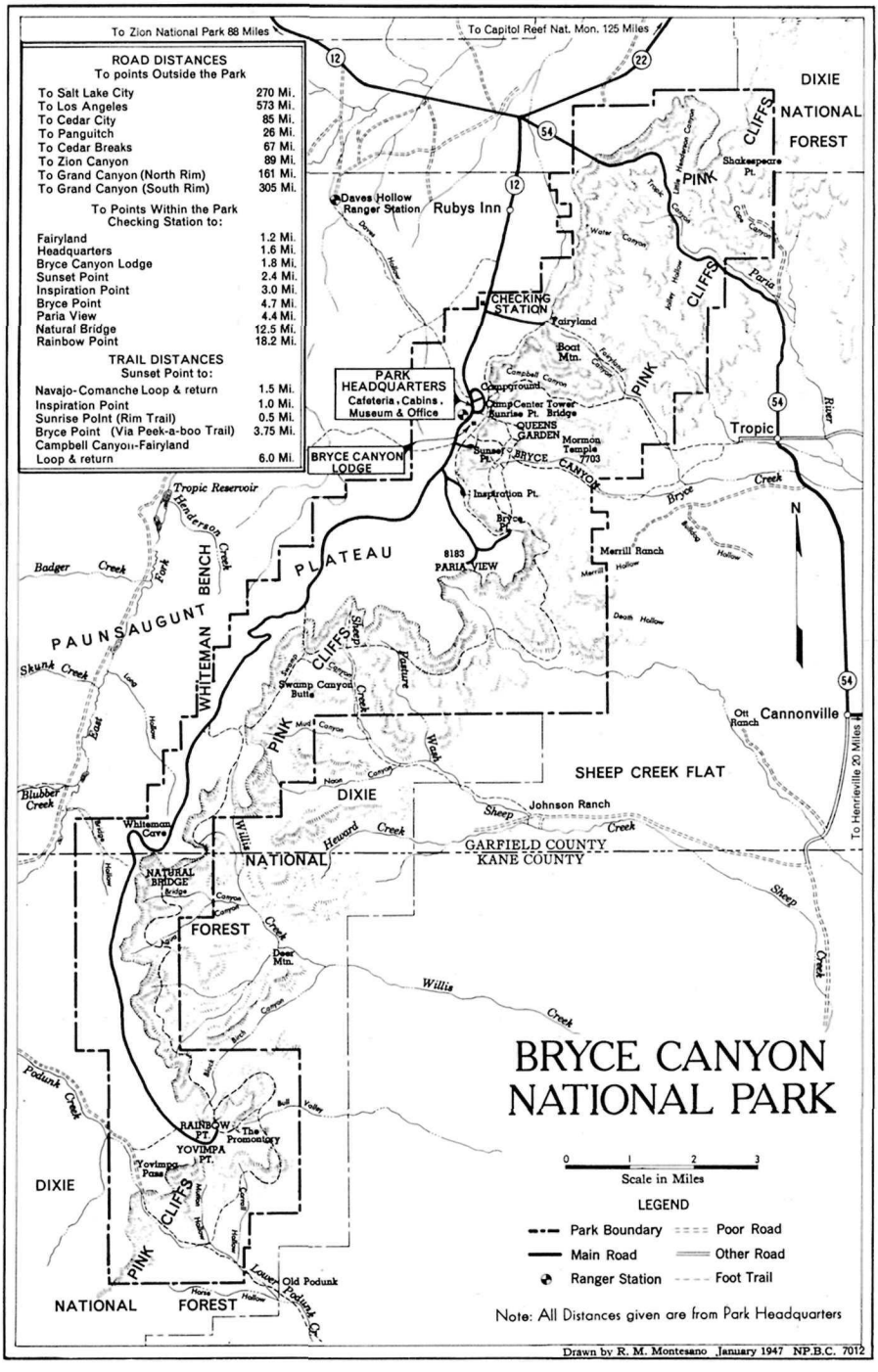
Travelers by rail may reach the park over the Union Pacific Railroad to Cedar City, Utah, the gateway to Zion, Bryce Canyon, and Grand Canyon (North Rim) National Parks and Cedar Breaks National Monument. Motor buses of the Utah Parks Co. operate to those areas.

Main bus lines operate from Salt Lake City and Los Angeles to Cedar City, where passengers going to the park may transfer to buses of the Utah Parks Co. On prior notice, connections may be made with the Santa Fe Trails System at Marysvale or Panguitch.

United Air Lines serves Salt Lake City, and from there passengers may go by Union Pacific Railroad or bus to Cedar City. Air service is also available from Los Angeles by Western Air Lines, with stops at Las Vegas, Cedar City, and Salt Lake City.

Roads and Trails

The National Park Service has completed an excellent road, 20 miles long, which follows the high rim the full length of the park plateau. Short spurs lead to such scenic places as Inspiration Point,



Bryce Canyon National Park

Bryce Point, Paria View, Natural Bridge, and Rainbow Point.

The roads are open during the spring, summer, and fall. Those in the vicinity of headquarters are kept open throughout the winter, except for brief periods during and immediately following storms.

Fine horseback and foot trails have been built in the interesting area under the rim. They lead into Queen's Garden, Silent City, Fairyland, Wall Street, Peek-a-boo Canyon, and other more remote points—each with its distinctive form. Trails are all easily traveled in good weather; horseback trips can be arranged in half- or full-day units to suit the individual. Inquiry should be made before attempting a trip, as stormy weather sometimes makes the condition of these trails uncertain.

Administration

Bryce Canyon National Park is administered as a unit with Zion National Park and Cedar Breaks and Zion National Monuments. The representative of the National Park Service in immediate charge is the superintendent, whose post office address is Springdale, Utah. All comments regarding service in the park should be addressed to him.

Naturalist Services

Each evening illustrated talks are given by members of the staff, who also conduct short hiking trips into Bryce Canyon every day of the summer season, according to schedules posted by the naturalist service.

Visitors are urged to use these facilities, which are provided free of charge by the Government.

Museum

At park headquarters the National Park Service has established an official information office and museum which is open daily throughout the main travel season. Here park visitors may secure information and free publications regarding this and other national parks. The museum exhibits cover such subjects as geology, biology, archeology, and history. The Zion-Bryce Natural History Association maintains a stock of publications, maps, and transparency slides which are for sale at reasonable prices in the museum. They are designed to assist in a better understanding and appreciation of the region.

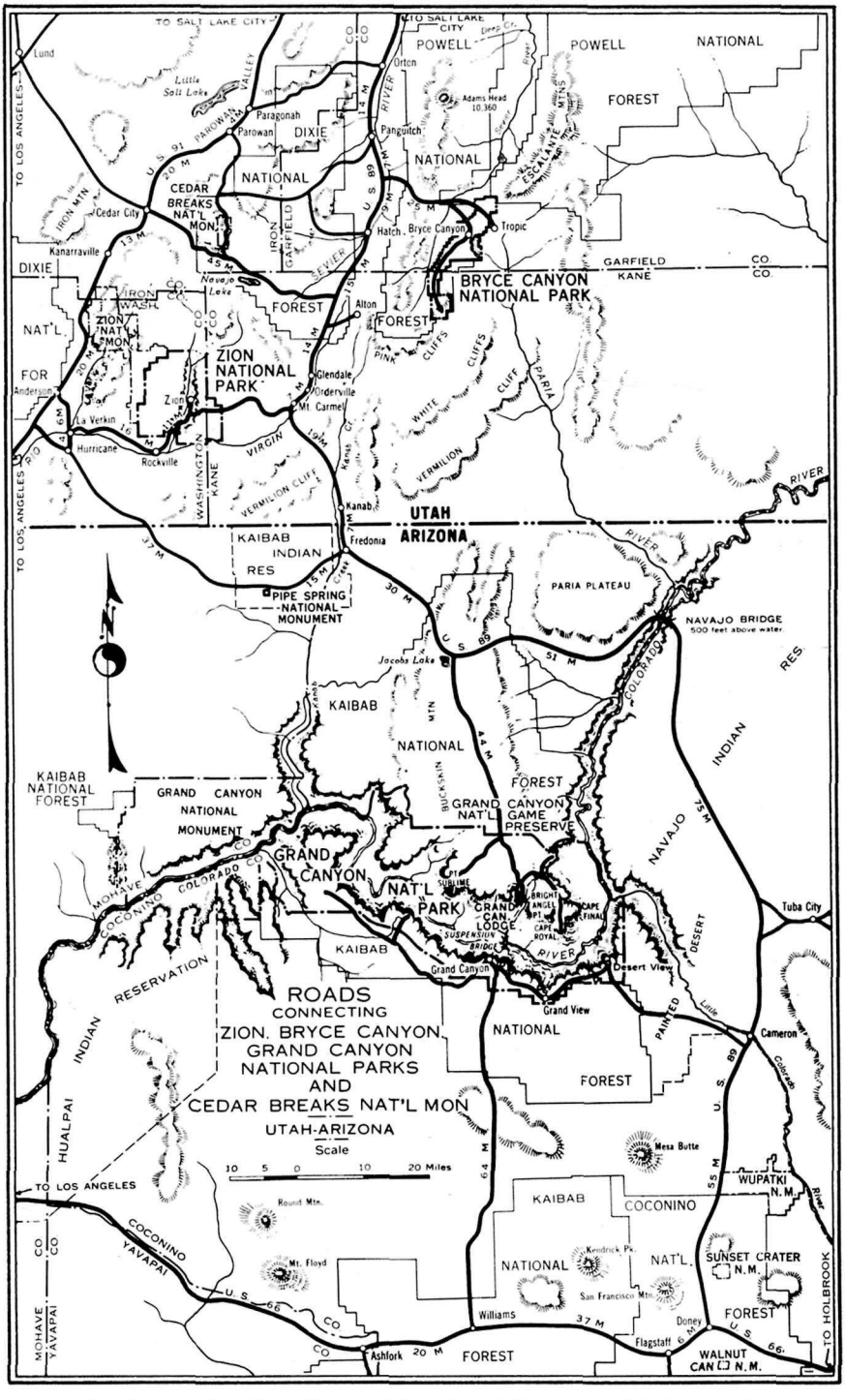
Free Public Campgrounds

An attractive public auto camp, maintained by the Government, is open from about April 15 to November 15; however, these dates vary according to weather conditions. Pure water and sanitary conveniences are provided, and groceries and campers' supplies may be purchased at the Bryce Camp store. Camping is limited to 30 days a year for each party.

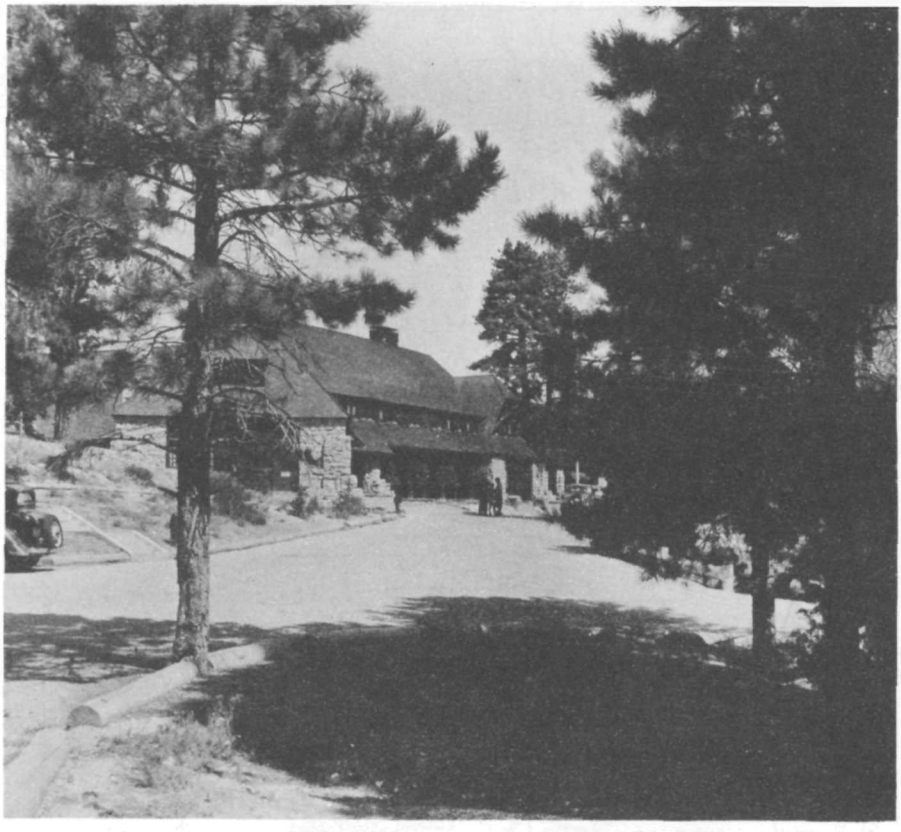
For those not carrying their own equipment and desiring to visit the park after the closing dates of the lodge and camp, there are camps near the park where accommodations can be found at any time of the year.

Accommodations

An attractive lodge is operated by the Utah Parks Co. from about June 15 to September 10. It consists of a central building and cabins. The cabins are standard and de luxe types, the latter having private bath, porch, and fireplace.



Roads connecting Bryce Canyon, Zion, Grand Canyon, and Cedar Breaks



Bryce Canyon Lodge (*Union Pacific Railroad photo*)

Meals are served in the lodge dining room.

There is also a cabin development which is open from about May 15 to October 15. Here are available a cafeteria, food store, and sleeping cabins. The cabins are equipped with electricity, running water, double beds, table, sink, shelves, and chairs.

As prices are subject to change from season to season, no rates are included in this booklet, but they may be obtained from the Utah Parks Co., Cedar City, Utah.

Transportation

Motorbus transportation and all-expense tours to Zion, Bryce Canyon, and Grand Canyon (North Rim) National Parks, Kaibab National Forest, and Cedar Breaks National Monument are furnished by Utah Parks Co., Cedar City, Utah, during the summer season and by special arrangement during the remainder of the year. An automobile trip from Bryce Canyon Lodge to Inspiration Point, Bryce Point, Paria View, Natural Bridge, and Rainbow Point and return is offered during the summer.

Saddle Horses

Saddle horses may be hired by the hour or day. Daily escorted trips are

made into the canyon and to Tower Bridge. Special guide service, if available, may also be obtained. Riding outfits for women may be rented at the lodge.

Post Office and Communication Service

Bryce Canyon Lodge is provided with post office, telegraph, and long-distance telephone service. The post office address during the summer season when the lodge is operating is Bryce Canyon National Park, Utah.

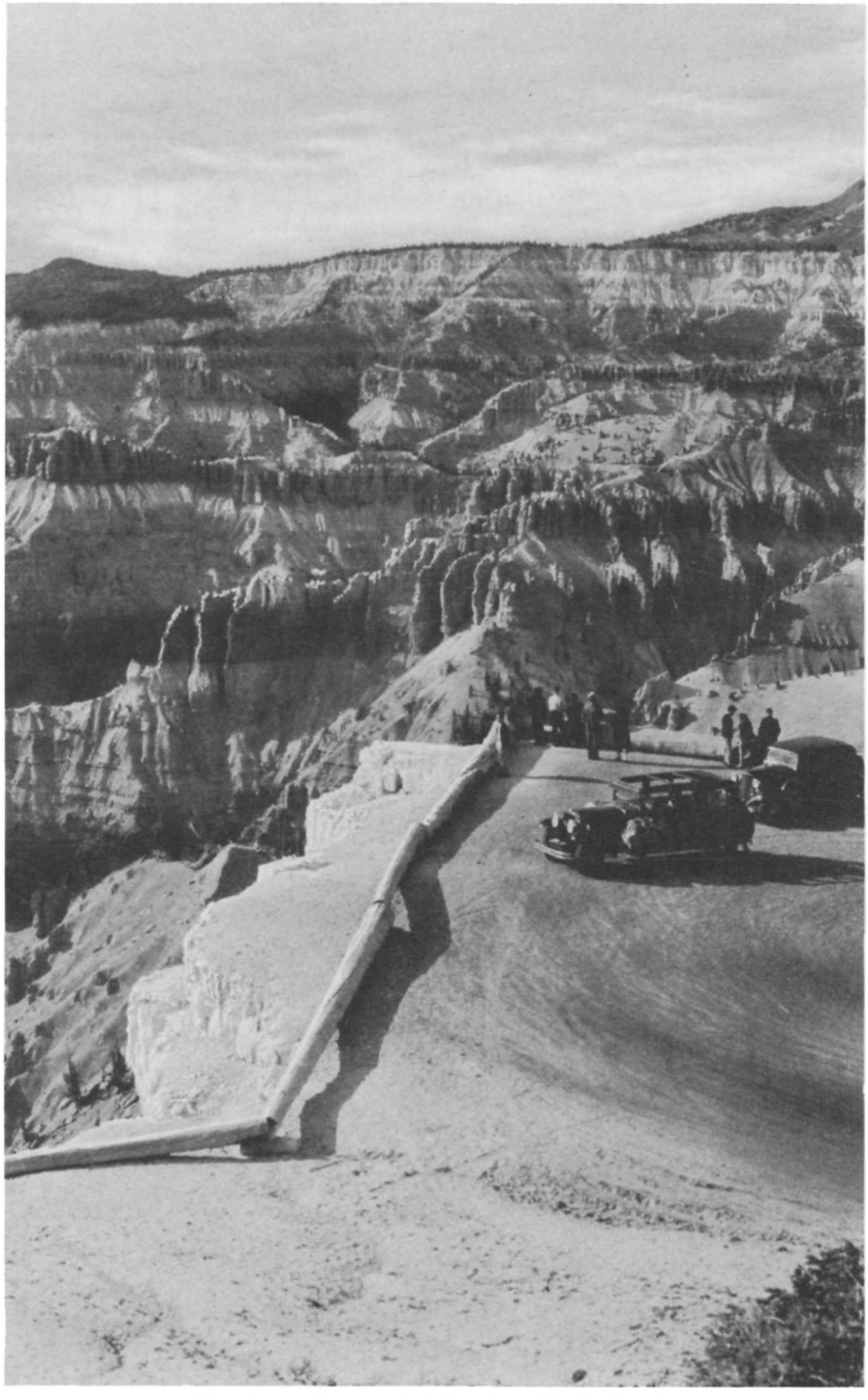
Miscellaneous Services

Fountain service is available in the lodge. Photographs of Bryce may be purchased here, and laboratories are maintained for developing and printing.

Curio stores, specializing in Indian handicraft, are operated. Curios, post cards, and other items may be obtained at the cabin camps, which also carry a complete line of foodstuffs.

Garage service, including storage and repairs, is provided near Bryce Lodge during the main season. A

Trails lead to the fantastically eroded formations (*Union Pacific Railroad photo*)



Motorists park on overlook for view of Cedar Breaks

regular service station, located on the highway near the lodge, furnishes gasoline, oil, tires, and batteries from approximately May 1 to October 30. Garages and service stations outside the park usually operate throughout the year.

A registered nurse is on duty at the lodge when it is in operation.

Cedar Breaks National Monument

Twenty miles east of Cedar City, within the Dixie National Forest, where the high plateau breaks away to the west, is a great amphitheater called Cedar Breaks, in the Pink Cliffs formation. The more spectacular part of the formation was established as a national monument by proclamation of President Franklin D. Roosevelt on August 22, 1933, and placed under the administration of the National Park Service. The monument embraces an area of 6,172.20 acres of federally owned land.

While Cedar Breaks is cut from the same geological formation as Bryce Canyon, there is a marked difference between these two scenic areas. There are not countless numbers of outstanding temples, spires, and minarets in the Cedar Breaks bowl, but Cedar Breaks is on a more gigantic scale and has a greater variety of tints. The Pink Cliffs here have a thickness of nearly 2,000 feet, and 47 different shades of color have been distinguished.

The heavily forested rim attains an altitude of 10,700 feet. The cliffs are white or orange at the top, breaking into tints of deep rose and coral. The high elevation also affords an excellent distant view of mountains and desert.

The Utah Parks Co. has provided a comfortable lodge with an attractive dining room, lobby, and rest rooms. Sleeping accommodations are available in cabins operated in connection with the lodge. Cedar Breaks Lodge is open from about June 15 to September 10.

A free public campground is maintained where water, cooking fireplaces, and fuel are furnished.

The season of accessibility varies with weather conditions, but is usually from early June to the first of November. On account of the high altitude, snows persist until late spring. During the summer season, the National Park Service maintains an information office and small museum near the parking area at Point Supreme.

Cedar Breaks

HELP US PROTECT THIS PARK

National parks are established "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Please cooperate in maintaining and protecting this park. The park rangers will help and advise visitors, as well as enforce regulations. When in doubt, ask a ranger.

The following observations are made for your guidance:

Preservation of Natural Features.—Trees, flowers, vegetation, rocks, mineral formations, or any animal, bird, or other life may not be disturbed, injured, or destroyed; and formations, rocks, and other natural features may not be defaced by writing, carving, or otherwise marring them. Since the park is a sanctuary for wildlife, hunting and the use of firearms are prohibited.

Camping.—Camp only in established campgrounds. Keep your camping area clean. BE CAREFUL WITH FIRE. Lunching and picnicking are permitted only in public auto camp.

Disorderly Conduct. — Proper conduct is required of all visitors for the benefit of others who are entitled to get the fullest possible enjoyment from the park.

Pets.—If you are carrying a dog, cat, or other pet, you may take it into and through the park provided it is at all times kept on leash or otherwise under physical restrictive control. Pets are not permitted in public buildings or on trails.

Trails.—Do not attempt to make short cuts; to do so you may endanger yourself as well as others using the trails. Before attempting more difficult trails seek advice from a park ranger.

Automobile Regulations.—(a) *Permit.*—A charge of $1 for each automobile is made at Bryce Canyon and Zion National Parks. One permit is good for both parks, and may be used during the remainder of the year in which issued. Trailer fee, $1 additional. Keep this permit with your car as it must be presented to reenter the park. All fees are deposited in the United States Treasury and are not available for expenditure in the park. Congressional appropriations are the only source of funds for administration and development.

(b) *Careful driving.*—The roads in the park are built purely for scenic purposes, not as high-speed thoroughfares. Observe speed limits and the usual rules of the road; keep to right; do not park on curves; pass cars going in the same direction only when the road ahead is clear and the vision unobstructed. The speed limit in the park is 35 miles per hour.

U. S. GOVERNMENT PRINTING OFFICE
REPRINT 1953 O-F—247960