

Bryce Canyon

NATIONAL PARK • UTAH

"the surface breaks off almost perpendicularly to a depth of several hundred feet—seems indeed as though the bottom had dropped out and left rocks standing in all shapes and forms as lone sentinels over the grotesque and picturesque scenes. There are thousands of red, white, purple and vermillion colored rocks, of all sizes, resembling sentinels on the walls of castles, monks and priests in their robes, cathedrals and congregations . . . presenting the wildest and most wonderful scene that the eye of man ever beheld . . ."

T. C. Baily
U.S. Deputy Surveyor, 1876

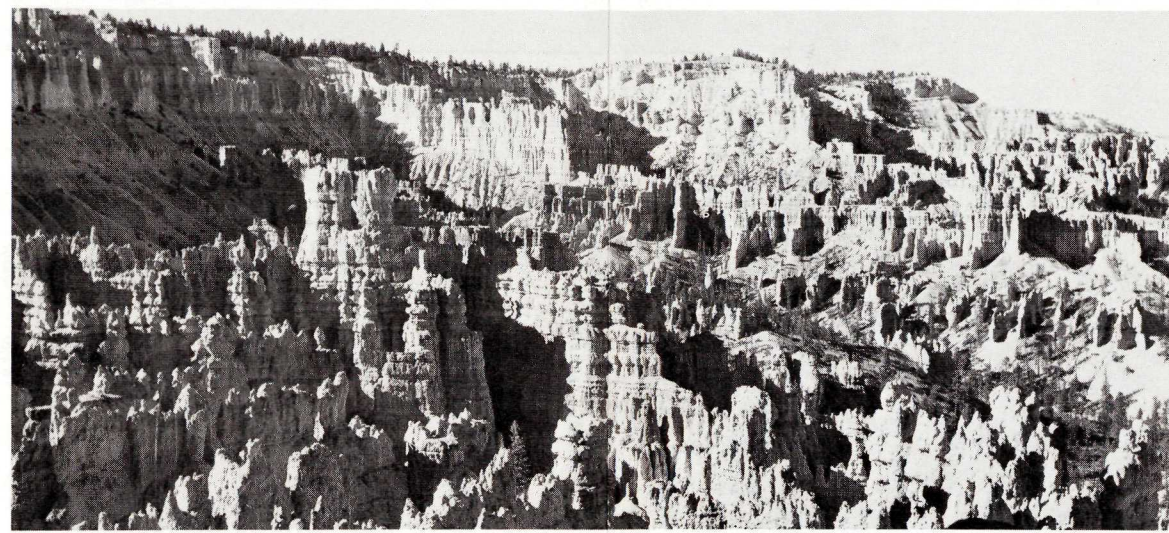
Written at Sunset Point, these words were among the first to describe an impression of the Bryce Canyon Amphitheater, whose moods vary with weather, season, and sunlight. The Bryce Amphitheater is only one of numerous alcoves cut into the Pink Cliffs, a 20-mile escarpment exposed on the eastern edge of the Paunsaugunt Plateau. Bordering this winding cliff line is the badland topography famous for its vivid colors and fragile forms. As geologist Herbert E. Gregory said, the Pink Cliffs are "a brilliant jewel in a land of superb texture and workmanship."

EARTH FORCES SET THE SCENE

In this high section of the Colorado Plateau are rock strata from the most recent chapter of geologic history. Formed from compacted sediments, these Tertiary strata cap a grand sequence of rock layers, the most ancient of which are seen in the depths of the Grand Canyon. At nearby Zion Canyon, the massive amber-colored sandstones represent the earth's middle history; at Bryce Canyon, these Zion rock layers are buried. Thus, the Pink Cliffs of Bryce are a colorful frosting on a geologic layercake, though these cliffs represent 16,000 feet of rock and a billion years of geologic history.

The Pink Cliffs, known collectively as the Wasatch Formation, are an accumulation of sand, silt, and lime washed into inland lakes from surrounding highlands and later compacted into layers of rock. These sediments began to accumulate about 60 million years ago. After the deposition stopped about 13 million years ago, the then existing sediments were consolidated and uplifted by powerful pressures from within the earth. Slowly the lands of southern Utah rose from what was then sea level to mountainous heights. During these continuing and unequal upheavals, huge blocks of earth's crust fractured and separated. The slow and persistent forces of erosion widened the gaps between massive blocks of rock, and in time, these became separate tablelands or plateaus that differed in elevation by thousands of feet.

The cause of the separations was a series of north-south faults that made up zones of weakness in the earth's crust. Bryce's Paunsaugunt Fault on the eastern margin of that plateau resulted in a 2,000-foot movement which raised the Table Cliffs and the Aquarius Plateau to their high commanding positions on the northeast skyline. The Sevier Fault on the western edge of the park separates



the Paunsaugunt from the Markagunt Plateau, where Cedar Breaks National Monument is located. This fault runs roughly north-south, parallel with U.S. 89. At the mouth of Red Canyon, you cross the Sevier faultline and view masses of black lavas against standing red siltstones. Red Canyon and the Sunset Cliffs on the south are a preview of Bryce Canyon landscapes.

At Bryce Canyon, the color and shape of the rock forms capture the imagination. Erosion created them all. The plateau rim and adjacent slopes are extremely active areas of erosion; its rim is retreating about 1 foot every 50 years.

The free-standing forms were and are fractured rocks sculptured by several physical forces. Erosional processes are one force. Those act somewhat uniformly at a given location, but hardness of rock types determines whether a particular block of rock will endure as a free standing form or will erode down to a pile of rock fragments. Limestone and siltstone are hard and durable rocks in arid climates. Where they form the bulk of a wall or act as a protective helmet for spires, the destructive processes of erosion are diverted, and in places, postponed. Rocks that are less hard, such as shales, poorly cemented sandstones, and conglomerates, are weaker and therefore erode more rapidly. The forces of uplift and faulting create a pattern of cracks into which water intrudes and freezes. Cracks widen and channels deepen from the freezing and thawing action, from chemical changes in the rocks caused by water and air, from plant root penetration, and raindrop erosion.

After immense periods of time, this jointing system creates a rough topography. In the flash flood season of late summer, streams pour through established channels, scour them and wash fallen debris down toward the Paria River. Parts of walls are split off, and isolated columns are undermined and collapse. The same processes that were so active in the past are still active today. The beatings of these erosive forces are also the creative agents forming new landscapes as the canyon rim retreats westward. What you see tomorrow will be different from what you saw yesterday.

PLANTS AND ANIMALS

Rocks, plants, wildlife, and even climate are interlocking agents. Where it is not too steep, the surface of the landscape is a living carpet upon which plants and animals continue their life cycles in organized harmony.

Varied plantlife is found on the poorly developed park soils. Elevation controls major forest types. At least three plant communities are found within an elevation differential of 6,600 feet to 9,100 feet. The pinyon-juniper forest along the lower hills of the Paria drainage is a pygmy forest composed of Utah juniper, pinyon pine, Fremont barberry, Gambel oak, and sagebrush. There is considerable mixing of representative species in the higher slopes below the rim. The yellow pine or ponderosa forest surrounds the campground and headquarters area. Ponderosa, greenleaf manzanita, Rocky Mountain juniper, and antelope bitterbrush are common representatives. In higher elevations southward toward Rainbow Point, the composition changes to a spruce-fir forest. Representative Douglas-fir, white fir, blue spruce and aspen shadow such shrubs as waxleaf current and common juniper. Bryce Canyon is not famous for its wildflower displays, but sego lilies, yellow evening primrose, wild iris, Indian paintbrush, and blue flax are common summer species. In autumn, rabbitbrush, goldenrod, gumweed and Senecio splash yellows and golds along the road sides.

The most common wildlife the visitor may see are the chipmunks and golden-mantled ground squirrels. The yellow-bellied marmot, badger, bobcat, porcupine, gray fox, and pine squirrel are present. The mule deer, the park's largest mammal, may generally be seen browsing the meadows in early morning or evening. The cougar and coyote are considered rare.

MAN AND THE CANYON

What Indian first saw Bryce Canyon? Did he marvel, was he apprehensive, or did he merely plod onward toward the comfort of that night's camp? The winter extremes of the Paunsaugunt Plateau must have dismayed Indians from all but seasonal occupation. Various hunting and gathering groups wandered through the area, and a Pueblo-type

people established small farming communities on the Paria and high desert valleys below the Pink Cliffs to the south and east. This marginal culture faded after 1200 A.D. The Paiutes, the most recent Indians, called the peculiar rock scenery at Bryce Canyon "Unka-timpe-wa-wince-pock-ich," which means "Red rocks standing like men in a bowl-shaped canyon." Paunsaugunt, another Paiute name, means "home of the beaver."

Possibly the first explorers to view the Pink Cliffs from a distance were Fathers Escalante and Dominguez in 1776 when these Spanish missionaries searched for a connecting route between the prospering missions of New Mexico and the new missions of central California. They did not enter the area, but the "Pinks" were visible on the high horizon. Early geographers barely touched the Bryce Canyon area. Maj. John Wesley Powell climbed the "Pinks" near the southern end of the Paunsaugunt in 1872. The next year, Almon Thompson climbed the cliffs near Rainbow Point to survey the countryside.

As part of the Mormon Church's plan to colonize southern Utah, some Mormons settled in the valley east of the Paunsaugunt Plateau in 1874. One settler built his cabin on a tributary that drained a large amphitheater. His name was Ebenezer Bryce. Though he grazed cattle here for only a few years, he left a vivid description of the place, "A hellova place to lose a cow!" and a name for the park.

It was not until the second decade of the 1900's that articles about the magnificent scenery began to appear in the public press. Bryce Canyon gained sufficient national attention to become a national monument on June 8, 1923. In 1928, Congress doubled the area and made it a national park, one of the world's most intricately eroded and strikingly beautiful sections of badland topography.

HOW TO SEE THE PARK

The park is in southwestern Utah and within a one-day drive of other units of the National Park System. The park is most easily reached by automobile from U.S. 89 at Bryce Junction, 7 miles south of Panguitch. Turn east at this junction and continue on Utah 12 for 17 miles to the park entrance. The park is not connected by paved roads, on the east, with State and Federal road systems.

From late April through October, days are pleasant and nights cool. In late July and August thunder-showers are fairly common. Severe winter lasts on the plateau from November through March. Winter days can be delightfully bright and crisp. Four major viewpoints on the Short Tour from Sunset Point to Paria View are maintained during winter, when deep snow transforms Bryce Canyon into another land of enchantment.

The park visitor center should be the first stop. Here, information and orientation are provided. See the short slide program and exhibits depicting the forces that shape the landscape. Ask about the various summer interpretive programs being offered. Each of the numerous viewpoints has its own display of curious and beautiful formations. From the Park's southern end at Rainbow Point, one can look back along the colorful escarpment.

A short tour is recommended for those on limited time schedules. Four spectacular views may be seen within 2 hours. Sunset Point, Inspiration Point, Bryce Point, and Paria View comprise the most scenic concentration of sculptured red rocks. You may also wish to stop at Fairyland View if you did not see it on the way into the park. Except for Fairyland and Sunset Points, the viewpoints are not designed for trailers. Trailers should be unhooked and parked at the visitor center parking lot or at Sunset Point, prior to your tour.

Hiking trails of Bryce Canyon exemplify the opposite of the principle "what goes up must come down!" The walking is hardest on your return trip—it's all uphill! Wear stout walking shoes. You may wish to carry water. At Sunset Point, the Navajo Loop Trail is a good place to start. A self-guiding booklet about the Queen's Garden Trail from Sunrise Point may be purchased at the visitor center or trail box. A fire permit is required for overnight trips, which are allowed only on the Under-the-Rim Trail south of Bryce Point.

Guided walks by park naturalists are given daily on the Navajo Loop Trail from mid-June through August. The 1½-mile trail descends 521 feet into the canyon and takes about 2 hours. At the rest area below the final switchbacks, you can gather strength while the naturalist summarizes the geology and natural history. Then you can return to Sunset Point at your own pace. Heart patients and visitors with high blood pressure should not subject themselves to the strenuous climb out.

Riding horseback is another way to see the colorful amphitheaters and inner canyons. Morning and afternoon trips, conducted by a concession wrangler, begin at the corral just below the lodge. Where horses and hikers use the same trail, be prepared for an inevitable meeting. Hikers are required to stand aside quietly and allow the horses to pass.

SAFETY TIPS

Ask a park ranger when you need help or advice. Protect yourself by being aware of the dangers and by heeding these safety precautions:

Less oxygen is available to breathe at Bryce because of its altitude (8,000 to 9,000 above sea level), so do not hurry and aggravate your heart.

The speed limit is 35 m.p.h. Violators will be cited. Park roads are designed for leisurely sightseeing. Use established pull-offs when stopping. Drive slowly at dusk to avoid colliding with mule deer crossing roads.

It is dangerous to the health of park animals and unlawful to feed them. Chipmunks and squirrels can inflict a deep and painful bite.

Do not throw rocks off trails or from the rim viewpoints. You could injure hikers on the trails below you.

Thunderstorms and lightning are frequent in late summer. Avoid isolated trees and viewpoints during storms. Lightning frequently strikes objects along the plateau rim.

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ADMINISTRATION

Bryce Canyon National Park, containing 56 square miles, is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Bryce Canyon National Park, Bryce Canyon, UT 84717, is in charge.

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, park and recreation areas, and for the wise use of all those resources. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

National Park Service
U.S. DEPARTMENT OF THE INTERIOR

MILES	1	2	3	4	5	6	7	8	9
0	1.6	3.2	4.8	6.4	8.0	9.7	11.3	12.9	14.5
10	16.1	17.7	19.3	20.9	22.5	24.1	25.7	27.4	29.0
20	32.2	33.8	35.4	37.0	38.6	40.2	41.8	43.5	45.1
30	48.3	49.9	51.5	53.1	54.7	56.3	57.9	59.5	61.2
40	64.4	66.0	67.6	69.2	70.8	72.4	74.0	75.6	77.2
50	80.5	82.1	83.7	85.3	86.9	88.5	90.1	91.7	93.3
60	96.6	98.2	99.8	101.4	103.0	104.6	106.2	107.8	109.4
70	112.7	114.3	115.9	117.5	119.1	120.7	122.3	123.9	125.5
80	128.7	130.4	132.0	133.6	135.2	136.8	138.4	140.0	141.6
90	144.8	146.5	148.1	149.7	151.3	152.9	154.5	156.1	157.7
100	160.9	162.5	164.1	165.7	167.3	168.9	170.5	172.1	173.7
500	804.7	809.4	814.1	818.8	823.5	828.2	832.9	837.6	842.3

USE THIS TABLE TO CONVERT MILES TO KILOMETERS
READ ACROSS AND DOWN. FOR EXAMPLE, 13 MILES
EQUALS 20.9 KILOMETERS

BRYCE CANYON NATIONAL PARK

Road ———

Hiking Trail - - - - -

Ranger Station [Icon]

Lodge [Icon]

Store [Icon]

Gas Station [Icon]

Airport [Icon]

Campground [Icon]

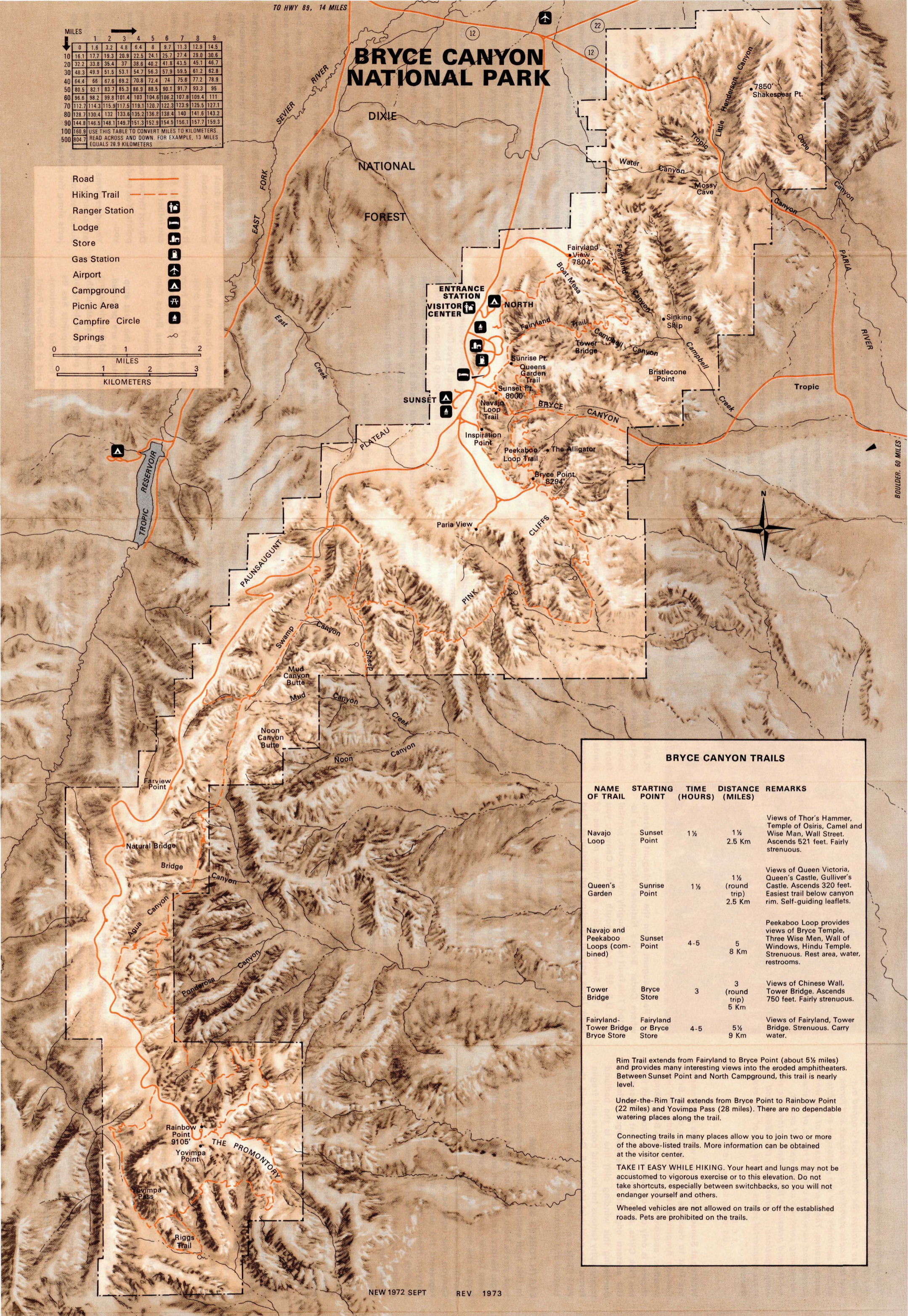
Picnic Area [Icon]

Campfire Circle [Icon]

Springs [Icon]

0 1 2
MILES

0 1 2 3
KILOMETERS



BRYCE CANYON TRAILS

NAME OF TRAIL	STARTING POINT	TIME (HOURS)	DISTANCE (MILES)	REMARKS
Navajo Loop	Sunset Point	1 1/2	1 1/2 2.5 Km	Views of Thor's Hammer, Temple of Osiris, Camel and Wise Man, Wall Street. Ascends 521 feet. Fairly strenuous.
Queen's Garden	Sunrise Point	1 1/2	1 1/2 (round trip) 2.5 Km	Views of Queen Victoria, Queen's Castle, Gulliver's Castle. Ascends 320 feet. Easiest trail below canyon rim. Self-guiding leaflets.
Navajo and Peekaboo Loops (combined)	Sunset Point	4-5	5 8 Km	Peekaboo Loop provides views of Bryce Temple, Three Wise Men, Wall of Windows, Hindu Temple. Strenuous. Rest area, water, restrooms.
Tower Bridge	Bryce Store	3	3 (round trip) 5 Km	Views of Chinese Wall, Tower Bridge. Ascends 750 feet. Fairly strenuous.
Fairyland-Tower Bridge Bryce Store	Fairyland or Bryce Store	4-5	5 1/2 9 Km	Views of Fairyland, Tower Bridge. Strenuous. Carry water.

Rim Trail extends from Fairyland to Bryce Point (about 5 1/2 miles) and provides many interesting views into the eroded amphitheaters. Between Sunset Point and North Campground, this trail is nearly level.

Under-the-Rim Trail extends from Bryce Point to Rainbow Point (22 miles) and Yovimpa Pass (28 miles). There are no dependable watering places along the trail.

Connecting trails in many places allow you to join two or more of the above-listed trails. More information can be obtained at the visitor center.

TAKE IT EASY WHILE HIKING. Your heart and lungs may not be accustomed to vigorous exercise or to this elevation. Do not take shortcuts, especially between switchbacks, so you will not endanger yourself and others.

Wheeled vehicles are not allowed on trails or off the established roads. Pets are prohibited on the trails.

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PRESERVATION OF THE PARK

Park rangers enforce regulations and provide for your protection. Help them preserve this natural environment—for those who come after you.

Fires: Be extremely careful and report any fires seen outside the campgrounds. Be certain your campfire is dead out! Don't throw cigarettes from automobiles or from horseback.

Camping and picnicking: Camp only in established campgrounds. Picnic only in campgrounds and in established picnic areas.

Environment: The park is a sanctuary for all wildlife; no hunting or trapping is allowed. Do not disturb or deface rocks, vegetation, or any other components of the park's fragile ecology.

Pets: Have your pets leashed at all times. They may not be taken on trails or into public buildings.

ACCOMMODATIONS AND OTHER SERVICES

Campgrounds: North Campground is immediately east of the park visitor center and has limited space for small trailers, but no hookups. Sunset Campground is one mile south of the visitor center. Camping can be enjoyed from about May 1 to November 1. Campsites have tables, fireplaces, and are near water and restrooms. Outside water supplies freeze up by October 1, and are drained. Camping is limited to 14 days in any one calendar year. No reservations can be made, and space is limited. It is best to arrive early in the day to be assured of a campsite. No **Campground fee** is charged. Gathering firewood is not permitted within the park. **Bring your own wood**, or you may buy it from the concession facility.

The lodge, near the rim of Bryce amphitheater, has sleeping accommodations and is open from about mid-June to Labor Day. It has a dining room, soda fountain, and gift shop. For reservations apply to T.W.A. Services, Inc., Utah Parks Division, P.O. Box 400, Cedar City, UT 84720.

Outside the park: Lodging and food are provided outside the park at Ruby's Inn during March thru December. The inn is also a U.S. Post Office. Pink Cliffs and The Pines motels are open year round.

Sundries and Gasoline: A store is near the Sunrise Point parking area. Films, souvenirs, and a modest selection of groceries are sold. The service station nearby is open from May to October. There is no auto mechanic.

Medical Service:

The park does not have a doctor in residence; first-aid can be given at park headquarters. Panguitch, 26 miles away, has a hospital.

Church Services:

Protestant services, under the Christian Ministry in the National Parks, are held each Sunday in summer. Catholic and Latterday Saints services are regularly scheduled.