

The Hoodoo



Map, Shuttle, & Hiking Guide

Summer 2010

Visitor Center Hours

Summer 8 a.m. – 8 p.m.

Fall/Spring 8 a.m.– 6 p.m.

Questions?
Bring this
newspaper
to the Visitor
Center!

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ZION NATIONAL PARK TRAVEL ADVISORY

For visitors planning to travel from Bryce Canyon to Zion National Park, please be aware that delays or road closures of up to 3 hours can be expected from mid-May to October due to road work at Zion. This work will be taking place on the switchbacks west of the Zion-Mt. Carmel Tunnel and will affect vehicles traveling from the East Entrance to the South Entrance, or vice versa. See the map on the back page of this newspaper or inquire at the Bryce Canyon Visitor Center for suggested alternate routes.

Death at Bryce Canyon

How many people die at Bryce? Fortunately, Bryce averages less than 1 fatality per year. In order of decreasing abundance, fatalities are caused by:

- Heart attacks
- Falling off cliffs
- Lightning
- Vehicle accidents

Unfortunately, hundreds of serious injuries have also needlessly occurred, some out of ignorance, but too many from ignoring park safety warnings.

Top 10 Causes of Bryce Injuries

#10 Unsafe Driving

- Speeding (limits are 25, 35 and 45 mph).
- Failure to wear seat belts.
- Passing on a double yellow line.
- Auto vs. animal. Watch for Wildlife!
- Rear-ending. Stop in pullouts, never in road.
- Not reducing speed on wet or icy roads.

#9 Climbing / Sliding down cliffs

The rock at Bryce forms crumbly cliffs and steep gravelly slopes. Hand and toe holds support nothing heavier than chipmunks. Climbing the rocks and sliding on the slopes may trigger lethal rockslides.

#8 Feeding Animals

Fed animals become aggressive. Even small animals can inflict bites requiring stitches and worse yet transmit disease. Watch wildlife from a distance and discourage animals that approach you.

#7 Ignoring Extreme Weather

At Bryce it is possible for the difference between the daily high and low to be as much as 50° F / 27° C! Lightning is a year-round danger – especially during summer monsoons! Seek the shelter of a building or your vehicle whenever the “flash-bang interval” (time between lightning and thunder) is less than 30 seconds.

#6 Dehydration

Drink 1 quart / liter every 1-2 hours. A well hydrated body is better able to regulate body temperature and is more resistant to heat exhaustion. Sunburns also lead to dehydration. Wear a hat, sunscreen, and sunglasses to protect from the sun overhead and reflected UV light.

#5 Leaving the Trail

Stay on designated trails and away from cliff edges where footing can be tricky. Even on seemingly gentle slopes, it can be impossible to keep your footing. Bring the maps on page 6 and 7 to avoid getting lost.

#4 Over-exertion

Park elevations reach 9115 ft (2778 m) subjecting you to 70% of the oxygen you might be used to. Bryce's trails start at the top which means all returns will be uphill. Turn back BEFORE you become tired. Know and respect your own physical limitations.

#3, #2, & #1 Bad Choice of Footwear

Wear hiking boots with good ankle support and “lug” traction. Hiking without hiking boots is like SCUBA diving without an air tank. Sport-sandals & “trainers,” are NOT safe hiking footwear.

Emergencies Call **911** or **435-676-2411**

24-hours a day or contact a Park Ranger

Park Headquarters

435 834-5322

Fax 435 834-4703

Lost & Found: 435 834-4736

Mailing Address

PO Box 640201

Bryce, Utah 84764-0201

Travelers Information Stations: Tune radio to 1590 or 1610 AM for park information

National Park Service
U.S. Department of the Interior



Web

Website: www.nps.gov/brca

Twitter: [brycecanyonNPS](https://twitter.com/brycecanyonNPS)

Information and Services

Visitor Center

In summer, open daily 8:00 am - 8:00 pm. Information, museum, publications, an award-winning film, backcountry permits, and lost-and-found services are available here.

Emergencies

24-hour emergency response, call 911 or 435 676-2411. Garfield Hospital, 435 676-8811, and Clinic, 435 676-8842 are in Panguitch.

Accessibility

Restrooms: the Visitor Center, Sunset Point, Bryce Canyon Lodge, and General Store are fully accessible. Sunset Campground has two sites reserved for people with mobility impairments. The ½-mile section of Rim Trail between Sunset and Sunrise points is paved and mostly level. Inquire at the Visitor Center for information on accessible ranger-led programs, and to obtain an Access Guide.

Restrooms

 Available year-round at the Visitor Center, North Campground and Sunset, Farview, and Rainbow points. Restrooms are also available April – October at Bryce Canyon Lodge, General Store, Sunset Campground, and Peekaboo Loop.

Phones

Available year-round at the Visitor Center. Phones are also available April - October at Bryce Canyon Lodge, General Store, and Sunset Campground.

Pets

If you bring your pet, be aware that it must be on a leash, under control, and you are required to clean up after your pet at all times. Pets are permitted at park viewpoints, campgrounds, and on paved or concrete surfaces or trails. Pets are not permitted in buildings or on unpaved trails.

Horseback Riding

Wranglers lead 2-hour and 4-hour horse and mule rides April - October. For same-day reservations, inquire at Bryce Canyon Lodge or call 435 834-5500. For advance reservations: Canyon Trail Rides, P.O. Box 128, Tropic, UT 84776; 435 679-8665. Information: www.canyonrides.com.

Post Office / ATM / Internet

Ruby's Inn has a post office open Mon-Sat (Bryce, UT 84764), an ATM, and internet services. Personal mail addressed to park visitors will not be accepted at Bryce Canyon National Park.

Entrance Fees

Private Vehicle: \$25 per vehicle, good for 7 days in Bryce Canyon National Park.

Individual: \$12 per person (pedestrian, bicycle, motorcycle, and organized group), good for 7 days in Bryce Canyon National Park.

Bryce Canyon Annual Pass: \$30, good for one year from date of purchase at Bryce Canyon National Park only.

Commercial Tours: Ask for rates.

Interagency Annual Pass: \$80, good for one year from date of purchase in all federal fee areas.

Interagency Senior Pass: \$10 lifetime pass for U.S. residents 62 or older.

Interagency Access Pass: Free lifetime pass for U.S. citizens who are permanently disabled.

Camping

North Campground: Open all year, 101 campsites (only one loop open in Winter). Available first-come, first-served Oct 1 – May 6. RV sites may be reserved May 7 – Sept 26 by calling 877 444-6777 or visit www.recreation.gov. Reservations can be made up to 240 days in advance.

Sunset Campground: Open late spring to early fall, 102 campsites. 20 tent sites are available for reservation up to 6 months in advance, all others first-come, first served.

Fees: Camping is \$15 a night per campsite (half price for Interagency Senior and Access pass holders).

Group Campsite: One site available by reservation only. Group size is limited to 7-30 people and 8 vehicles. Cost is \$55-\$100 per night, dependent upon group size. Campsite may be reserved by calling 877 444-6777 or online at www.recreation.gov.

Dump Station: No hookups are in the park, but a fee-for-use dump station is available in Summer near North Campground.

Other Campgrounds: For camping reservations in nearby National Parks, call 877 444-6777 or visit www.recreation.gov. Public campgrounds are available on US Forest Service, BLM, and Utah State Park lands nearby. Private campgrounds with showers and hookups are available outside the park.

Recycling

Recycling bins are located at the entrance to Sunset & North Campgrounds, Sunset Point, the General Store and the Lodge. Now accepting aluminum cans, plastic (#1 – 7), cardboard, tin, and glass.

Lodging

Bryce Canyon Lodge: Open April 1 - October 31, has cabins, motel rooms and suites, a restaurant, and gift shop. For lodging reservations, write to: Bryce Canyon Lodge, P.O. Box 640041, Bryce Utah 84764, call 877-386-4383; or visit brycecanyonforever.com.

Other Lodging: Available near the park entrance and in Tropic, Cannonville, Bryce Junction, and Panguitch.

Food Services

Bryce Canyon Lodge: Open April 1 - October 31. Dining room serves breakfast, lunch, and dinner. The General Store, open mid-April to mid-October, has groceries, quick meals, and camper supplies.

Other Food Services: Restaurants are available near the park entrance and in Tropic, Bryce Junction, and Panguitch.

Showers & Laundry

Coin-operated shower and laundry facilities are available at the General Store, open April - October, and outside the park at some nearby establishments.

Bicycles

Bicycles are restricted to paved roadways in the park. The nearby Dixie National Forest has a paved 5-mile bicycle path through Red Canyon, and many miles of challenging and spectacular mountain bike trails. Grand Staircase-Escalante National Monument has countless miles of dirt roads suitable for mountain biking. Contact Dixie National Forest, P.O. Box 80, Panguitch, UT 84759, 435 676-9300, www.fs.fed.us/r4/dixie; or Garfield County Travel Council, P.O. Box 200, Panguitch, UT 84759, 800 444-6689; www.brycecanyoncountry.com; also www.ut.blm.gov/monument.

Picnic Areas

Picnic areas are available year-round at Sunset Point, the General Store, Rainbow Point, and at the south end of North Campground April - October. Water faucets are available seasonally at all of the above locations except Rainbow Point. Fire grates are available only at the North Campground Picnic Area.

Religious Services

Available in the park during summer months and outside the park year-round. For more information, inquire at the Visitor Center or the Bryce Canyon Lodge.

How to Make the Most of Your Time



Less Than 4 Hours

Visitor Center

Stop at the Visitor Center for information, museum exhibits, and a 22-minute award-winning orientation film, shown daily 8:00 a.m. to closing, on the hour and half hour.

Auto Tour of the Overlooks

Ride the shuttle or drive your own vehicle to Bryce, Inspiration, Sunset and Sunrise points first. If you have more time, visit overlooks in the southern portion of the park.

Short Walk

Hike a short segment of the Rim Trail or select one of the hikes from the "Easy to Moderate" group in the hiking table on page 7.

More Than 4 Hours

Visitor Center, Auto Tour, Short Walk and:

Day Hike

Bryce is best experienced from its trails. Select one of the combination loops from the "Moderate" or "Strenuous" groups in the hiking table on page 7.

Ranger Program

Attend a free Ranger Program to learn more about the natural and cultural history of this region. Check at the Visitor Center for the current program schedule.

Horse Ride

Take a horse ride into Bryce Canyon. Wranglers lead 2-hour and half-day rides daily. Inquire at Bryce Canyon Lodge.

Auto Tour

Where is the best overlook?

There are 14 viewpoints along Bryce Canyon's 18-mile scenic drive (one-way distance) and everybody determines his or her favorite for a multitude of reasons. Furthermore, for every 15 minutes you extend your visit, you can see another overlook. If you stop at all the viewpoints, it could take as little as 3-4 hours.

Our most famous views are found in Bryce Amphitheater, including Sunrise, Sunset,

Inspiration and Bryce points. The southern overlooks feature long-distance, panoramic views across the Grand Staircase-Escalante National Monument.

Since all the viewpoints are on the left side of the road as you drive south towards Rainbow Point, we recommend stopping at the viewpoints as you drive north on your return trip. This way, each stop will be an easy and safe right turn.

Backcountry Hiking

Bryce Canyon has two trails designated for overnight hiking: the 9-mile Riggs Spring Loop, and the 23-mile Under-the-Rim Trail. Backcountry camping is by fee permit on a first-come, first-served basis. Permits may be purchased at the visitor center from 9:00 a.m. until one hour before the visitor center closes.

There are two group sites available with a limit of 15 people per site. Campfires are not allowed in the backcountry. Use a campstove to cook meals. Backcountry water sources are unreliable and should be filtered. Each hiker should carry a minimum of one gallon of water for each day they are in the backcountry.

The 23-mile Under-the-Rim Trail can be accessed by four different connecting trails along the park road. The 9-mile Riggs Spring Loop Trail begins and ends at Yovimpa Point. The park does not provide shuttle service to the southern end of the park. Note that these trails and campsites are in forests and *not* among the hoodoos.

Stop at the visitor center and talk to a ranger before making any overnight trip into the backcountry. Maps and information on trails, campsites, water availability, and backcountry regulations are available at the Visitor Center. Ask for a free Backcountry Information brochure to aid in planning your trip.

Ranger-led Activities



Geology Talk

Hoodoos, ancient lakes and something called frost wedging? Geologists have spent years studying the unique story of Bryce Canyon. Spend a half hour with a ranger as we discuss the current scientific explanation behind Bryce Canyon's unique geologic history.
Sunset Point at 11:30 a.m. and 2:00 p.m.
Duration: 30 minutes



Rim Walk

Great views, fascinating plant and wildlife stories, a touch of geology, a smattering of cultural history – what more could you want? Join a park ranger for an overview of Bryce Canyon as you stroll along the rim of the Bryce Amphitheater.
Sunset Point at 5:00 p.m.
Length: 1 mile, Duration: 1.5 hours



Evening Program

Bryce Canyon's diversity comes to life during ranger programs at the Bryce Canyon Lodge or Visitor Center auditoriums. In addition, programs are occasionally offered at the North Campground Amphitheater. Auditoriums are wheelchair accessible, the North Campground facility is not.
Duration: 1 hour



Canyon Hike

Join a park ranger for a hike down into the heart of the Bryce Amphitheater. Enjoy face to face encounters with hoodoos. Immerse yourself in a labyrinth of breathtaking views and engaging stories about all that surrounds you.
Length: 1.5 to 2 miles
Duration: 2 to 2.5 hours



Astronomy Programs

Join dark rangers, volunteers, and NASA Solar System Ambassador Patrick Wiggins, to learn about the heavens, and view Bryce Canyon's night skies through telescopes (weather permitting). Offered most Tuesdays, Thursdays, and Saturdays. Ask at the Visitor Center or look on page 10 for program schedules.
Duration: 2 hours



Full Moon Hike

Group size is limited to 30 people; *get your first-come first-served tickets at the Visitor Center the morning of the hike.* Not for children 5 and under. Offered two nights each month during the full moon. **HIKING BOOTS ARE REQUIRED.** Check page 10 for schedule.
Length: 1.5 to 2 miles
Duration: 2 to 2.5 hours



Kids Programs

While most of Bryce Canyon's ranger programs are family friendly, some may be too technical for younger children. However, these in particular are fun for kids and parents alike. Rangers present a wide range of programs appealing to a variety of interests. Most Kids Programs require reservations, inquire at the Visitor Center.
Duration: 1 hour



Become a Junior Ranger!

Attending a ranger program is the #1 requirement toward completion of your Junior Ranger workbook. Ask how you can become a Bryce Canyon Junior Ranger* at the Visitor Center and, while you are there, check the schedule of upcoming ranger programs.

*ages 5 and up

Park Profile

Established

1923 as Bryce Canyon National Monument administered by the U.S. Forest Service; Congress passed legislation in 1924 to create the national park and, in 1928, Bryce Canyon National Park was officially established.

Significance

Established to preserve and protect outstanding scenic and scientific values. Best known for the beautiful and bizarre rock spires called hoodoos and the dark night sky.

Hoodoo

[hoo'doo] n. 1. A pinnacle or odd-shaped rock left standing by the forces of erosion. 2. v. To cast a spell or cause bad luck. 3. Voodoo.

Elevation / Size

Lowest: 6,620 feet (2018 m) Yellow Creek. Highest: 9,115 feet (2778 m) at Rainbow Point. 55 square miles (35,835 acres)

Name

Ebenezer and Mary Bryce lived in the area from 1875-1880 and aided in the settlement of southwestern Utah and northern Arizona.

Humans

Ancestral Puebloans probably lived in the area from 2,000 years ago. They were followed by the Fremont Culture through the 1200s, then the Southern Paiutes until 100 years ago. Mormon settlers arrived in the 1870s. Park visitation in 1929 was 22,000; last year it was 1.5 million.

Plant Life

More than 400 native plant species live in the park. Pinyon pine and juniper grow among the hoodoos at low elevations; ponderosa pine forests dominate the plateau top; and spruce, fir, and aspen thrive at the highest elevations. Bristlecone pines, some more than 1,600 years old, live at elevations throughout the park.

Animal Life

Utah prairie dogs, a threatened species, can be seen in open meadows. Mule deer and Pronghorn (mistakenly known as Antelope) are the most common large mammals seen. Mountain lions and black bears live in the park, but are rarely seen. About 210 species of birds visit Bryce.

Bryce Canyon Lodge

Designed by Gilbert Stanley Underwood and built in 1925, it is a National Historic Landmark. Of the four lodges in the Union Pacific Loop Tour (Bryce Canyon, Cedar Breaks, Zion, and Grand Canyon-North Rim), the Bryce Canyon Lodge is the only original still standing.

Hoodoos: The Odyssey of an Oddity

Hoodoo Pronunciation: 'hü-dü *noun*:

Eymology: West African; from voodoo

1: a body of practices of sympathetic magic traditional especially among blacks in the southern United States

2: a natural column of rock in western North America often in fantastic form

3: something that brings bad luck

4: nonsense, hokum, bunkum

transitive verb

1: to cast a spell on; broadly

2: to be a source of misfortune to

- Merriam - Webster online (www.m-w.com)

The geologic history at Bryce Canyon National Park is rich and complex. Many processes and events have interacted over vast amounts of time to create and continually alter this unique landscape. The story begins long before multicolor hoodoos emerged from this limestone that geologists call the Claron Formation. First, you need to lithify sediments – turn them to rock. Before lithifying sediments, you need to trap them in a basin. To build a basin you need to first build mountains.

Approximately (~) 200 million years ago (Ma), Earth's crust was crinkling throughout Nevada, into southern Canada. A strong, dense Pacific seafloor had smashed into North America's weaker continental crust. Much was at stake as the loser would be forced down and melted in Earth's mantle. Although North America remained on top, it was shattered in the contest. Over the 120 million year match, compressional forces bent, folded, broke, and heaved our crust into the sky, giving birth to the once mighty Sevier Mountains. Given enough time, rain and snow become geologic jackhammers splitting mountains apart. From the mountains, streams and rivers carried debris eastward, pulverizing the boulders to mud in transit.

Slightly before the dinosaurs went extinct, ~ 65 Ma, the land in the Western U.S. changed dramatically. Down but not out, the oceanic plate pushed up our continental crust, stubbornly surfing atop the mantle instead of sinking and melting. This attempt at escaping uplifted land, forming the Rocky Mountains and warping Utah and Arizona. The continued slow uplift shaped a land-locked basin between the Sevier Mountains and the younger Rockies. When the rivers wearing down

the Sevier Mountains reached this basin they became braided streams and deposited layers of muds and silts. At the lowest levels, chains of lakes and ponds formed. Water escaped through evaporation, but with no rivers flowing out of the basin, the sediment was trapped. Between 55 - 30 Ma this mammoth mud puddle, known as the Claron Basin, continued to fill with sediments rich in calcium carbonate – dissolved limestone.

The Claron Formation consists of two types of limestone rock. It has a lower pink member and an upper white member. In the early years of the basin, the environment appears to have been more marsh-like, where plant roots helped oxidize iron to give the sediments a red color. Within the pink member, thin and non-continuous gray layers formed, suggesting that individual ponds within this marsh setting became so salty and/or mineralized that only cyanobacteria could survive. These algal-like creatures enriched limestone with magnesium they took from the water to create dolostone – important to hoodoo formation. With the passage of time and an increase in water depth, the basin transitioned into purer lakes where the less iron-rich white limestone was deposited.

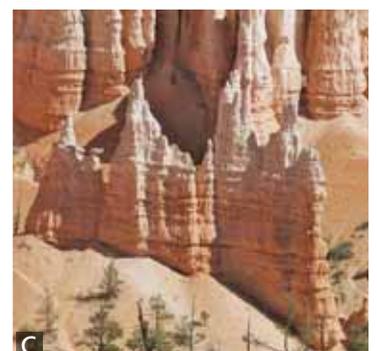
Geologists are unsure as to this mud puddle's fate as rocks that might have recorded this story do not exist. Did it evaporate away? Was it eventually drained as the basin was uplifted? What geologists are sure of is that over time these beds of sediment were compressed into rock and uplifted from 3000 ft to ~9000 ft in elevation. This uplift began ~15 Ma, forming the Colorado Plateau. About 8 Ma, the Bryce Canyon area broke off this uplift as the Paunsaugunt Plateau and has been sinking ever since into the Great Basin.

Technically, Bryce is not a canyon because canyons are primarily carved by flowing water – a stream or a river. Naturally acidic rainwater dissolves limestone, making the rounded edges of hoodoos, but the freezing and thawing of water does most of the sculpting at Bryce Canyon.

Approximately 200 days a year, ice and snow melt during the day and refreeze at night. When water becomes ice, it not only gets harder but expands to ~110%



Utah region 50 million years ago. Sediment eroded from mountains in Northwestern Utah was deposited in a lake, lithified (turned to stone), and later uplifted to be re-eroded into hoodoos.



Look closely at the rock formations and it becomes easier to see the progression from fins (A), which develop windows (B), that later collapse to form hoodoos (C).

its original volume! This exerts enormous pressures on the rocks, forcing them apart from inside the cracks. First attacking the fractures created during uplift and faulting, the rock is chiseled into broken remains. Monsoon rains remove this debris, helping to reveal fins, the first step in hoodoo creation. Most commonly, the second step in hoodoo formation begins when frost-wedging cracks the fins, making holes we call windows. When windows collapse they create the rust painted pinnacles we call hoodoos. We often think of this process as hoodoo creation; when, in reality, it's just another step in water's endless process of destroying the rocks it began creating 55 Ma.

Although visitors to Bryce come to see the hoodoos in the Claron Formation, five other rock formations also exist in the park. They tell stories of dinosaurs, beaches, and of a sea that once separated North America into two large islands. Ask a ranger to learn more about these times in Earth's history.

The Wild Side of Bryce Canyon

The Pronghorn: Built for Speed



Dan Ng

On this Pronghorn buck you can clearly see the forward-facing "prongs" from which the species derives its name.

They evolved at a time when North America was home to fierce predators. Today, no land animal in the Western Hemisphere can match their speed and only one in the world, the African Cheetah, can run faster. Based upon reports from explorers and settlers crossing the American frontier in the 1800s,

some researchers believe that the Pronghorn population may have equaled – or possibly even exceeded – that of the Bison before the westward expansion began – more than 40 million Pronghorns! They can run at speeds in excess of 60 miles per hour (98 kph) for as long as 4 minutes and have been observed running for several miles at speeds between 30 and 40 mph (48-60 kph).

But why the need for all this speed when no living predator in North America can match them?

These fleet footed animals are relics, a link to the past as one of the few remaining survivors of the last Ice Age. Pronghorns evolved when the hemisphere was home to the American Cheetah as well as other large predators and, in order to survive, had to be fast. In addition to their amazing speed, they also have developed keen eyesight and are able to detect movement up to 4 miles away!

With no living natural predator these animals thrived, however, their numbers were reduced to less than 20,000 animals by the early 1900s. The primary reasons for this were market hunting – at the turn of the 20th



Kevin Doxstater

Though they are frequently called "antelope", Pronghorn are not closely related to the antelopes of India and Africa.

Century you could buy a whole Pronghorn in Denver, Colorado for 25 cents – and the "fencing of the west" by ranchers. In portions of their range Pronghorns migrate several hundred miles and, while fast, they are not great jumpers. Unable to get past the rancher's fences to reach their winter foraging grounds, they would frequently starve.

In Utah the species was completely extirpated and a successful reintroduction program was begun in the 1970s. Look for Pronghorns in the sagebrush meadows both inside and outside of the park. View them from a distance and please do not obstruct traffic by parking on roadways.

A Threatened Resident - Utah Prairie Dogs

A year-round inhabitant of Bryce Canyon's high plateau meadows is the Utah Prairie Dog, *Cynomys parvidens*. Although called a prairie "dog", this species is actually a member of the rodent family. Prairie dogs live in complex social colonies or "towns." Their burrow systems are made up of several chambers and provide the animals with protection from predators, places to raise young, store food, and hibernate through the cold winter months. Utah Prairie Dogs are considered "keystone species" that perform a variety of important ecological functions including soil aeration which helps plants grow, providing prey for other animals, and maintaining healthy meadow ecosystems.

The Utah Prairie Dog's range is the most restricted of the four prairie dog species in North America and is limited to the southwestern quarter of Utah. Once nearly eradicated through poisoning, disease, habitat loss and drought, Utah Prairie Dogs currently number less than 5,000 animals.

The Utah Prairie Dog has been federally listed under the Endangered Species Act since 1973 and is protected as a threatened species. Bryce Canyon National Park reintroduced the Utah Prairie Dog from 1974 through 1988 and is the only National Park Service unit where they occur. Today,



Kevin Doxstater

approximately 200 Utah Prairie Dogs are found within several meadow complexes within the Park. Every year these colonies are monitored and counted to track the health of the animals and their habitat.

Although protected, the Utah Prairie Dog still faces challenges to its survival as human development, disease and drought continue to threaten remaining colonies. Please help us protect our Utah Prairie Dogs!

- Drive slowly around prairie dog towns – they live in the Park's meadows and can be seen next to and sometimes crossing roads.

- Do not feed or approach prairie dogs: it is illegal *and* dangerous! All prairie dog species may carry and transmit diseases to humans. By feeding wildlife you decrease their ability to survive in the wild.

Bryce Canyon National Park is helping to recover and protect the Utah Prairie Dog. We're lucky to have this special animal within the Park – please appreciate these amazing creatures from a distance!

To learn more about Utah Prairie Dogs watch our video podcast at: www.nps.gov/bcr/photosmultimedia/podcasts.htm

Wings Over Bryce Canyon



Watching birds is one of America's most popular pastimes and over 200 species of birds are known at Bryce Canyon National Park. Pictured above are 16 of the park's most common species; look for them during your visit (left to right, top to bottom): Peregrine Falcon, Red-tailed Hawk, Clark's Nutcracker, Steller's Jay, Western Bluebird, Black-chinned Hummingbird, Mountain Chickadee, White-breasted Nuthatch, Dark-eyed Junco, Green-tailed Towhee, Wild Turkey, Common Raven, Yellow-rumped Warbler, White-throated Swift, American Robin, and Western Tanager.

What Other Animals Live Here?

For a small park, Bryce Canyon has several types of habitat which support a diversity of wildlife. While you may not see lots of any one species, you will see a variety of animals if you know when and where to look.

Habitat: Sagebrush, Meadow, Forest, Canyon, All habitats

Season: W=Fall/Winter, S=Spring/Summer, A=all seasons

Best time to look: d=day, t=twilight, b=both day and twilight

Difficulty in finding: e=easy, h=hard, u=unlikely

NEVER approach or attempt to feed any wild animal!

Mammals:

Mule Deer	A,b,e
Pronghorn	A,d,h
Elk	W,t,h
Prairie Dog	S,d,e
Coyote	A,b,h
Gray Fox	A,b,h
Ringtail	A,t,h
Black Bear	A,b,u
Mtn. Lion	A,b,u
Jackrabbit	A,b,e
Cottontail	A,b,e
Squirrels	S,d,e
Chipmunks	S,d,e

Birds:

Turkey Vulture	S,d,e	Dark-eyed Junco	A,d,e
Golden Eagle	A,d,h	Violet-green Swallow	S,d,h
Red-tailed Hawk	S,d,h	W. & Mtn. Bluebirds	S,d,h
Peregrine Falcon	S,d,u	Western Tanager	S,d,e
Wild Turkey	A,d,h	Pygmy Nuthatch	A,d,h
Blue Grouse	A,d,h	Reptiles/Amphibians:	
Mourning Dove	A,d,h	G.B. Spadefoot Toad	S,d,u
Great Horned Owl	A,b,u	N. Leopard Frog	S,d,h
N. Saw-whet Owl	A,t,u	Short Horned Lizard	S,d,e
C. Nighthawk	S,t,e	Sagebrush Lizard	S,d,h
C. Raven	A,d,e	Gophersnake	S,d,u
Clark's Nutcracker	A,d,e	W. Rattlesnake	S,b,h
Steller's Jay	A,d,e		

Touring the Park

Bryce Canyon Shuttle



FREE SHUTTLE! Bryce Amphitheater Route

The Bryce Canyon Shuttle is voluntary. Riding the shuttle reduces traffic, conserves fuel, saves time, money, and the planet! Shuttle buses are fully accessible. Pets are not allowed.

2010 Season: May 7 – October 10

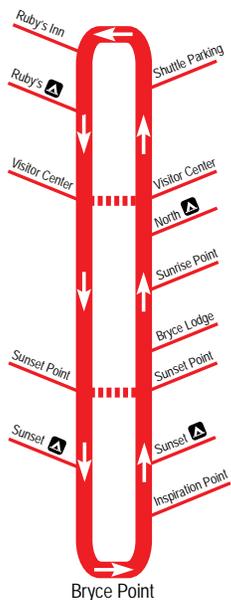
Hours:
8:00 am – 8:00 pm Mountain Daylight Time

Bus Interval:
12 – 15 min

Last Bus ENTERS Park:
7:40 pm

Last Bus EXITS Park:
8:20 pm

In addition, there will be two round-trip tours to Rainbow Point offered each day, one in the morning and one in the afternoon. For further information, inquire at the Shuttle Boarding Area outside the park or at the Visitor Center.



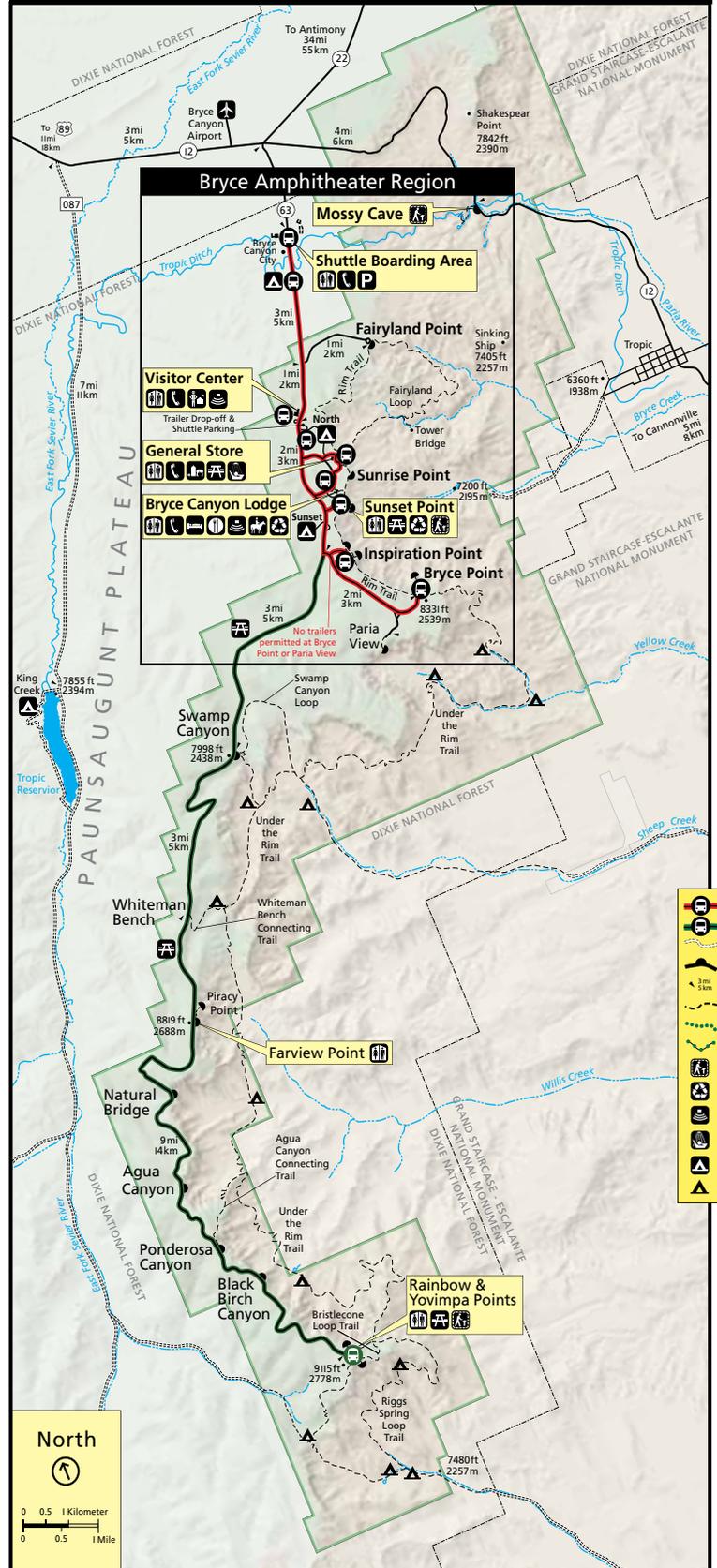
Scenic Drive Highlights . . .



Natural Bridge, Agua Canyon, Yovimpa Point, Rainbow Point (clockwise from top left).

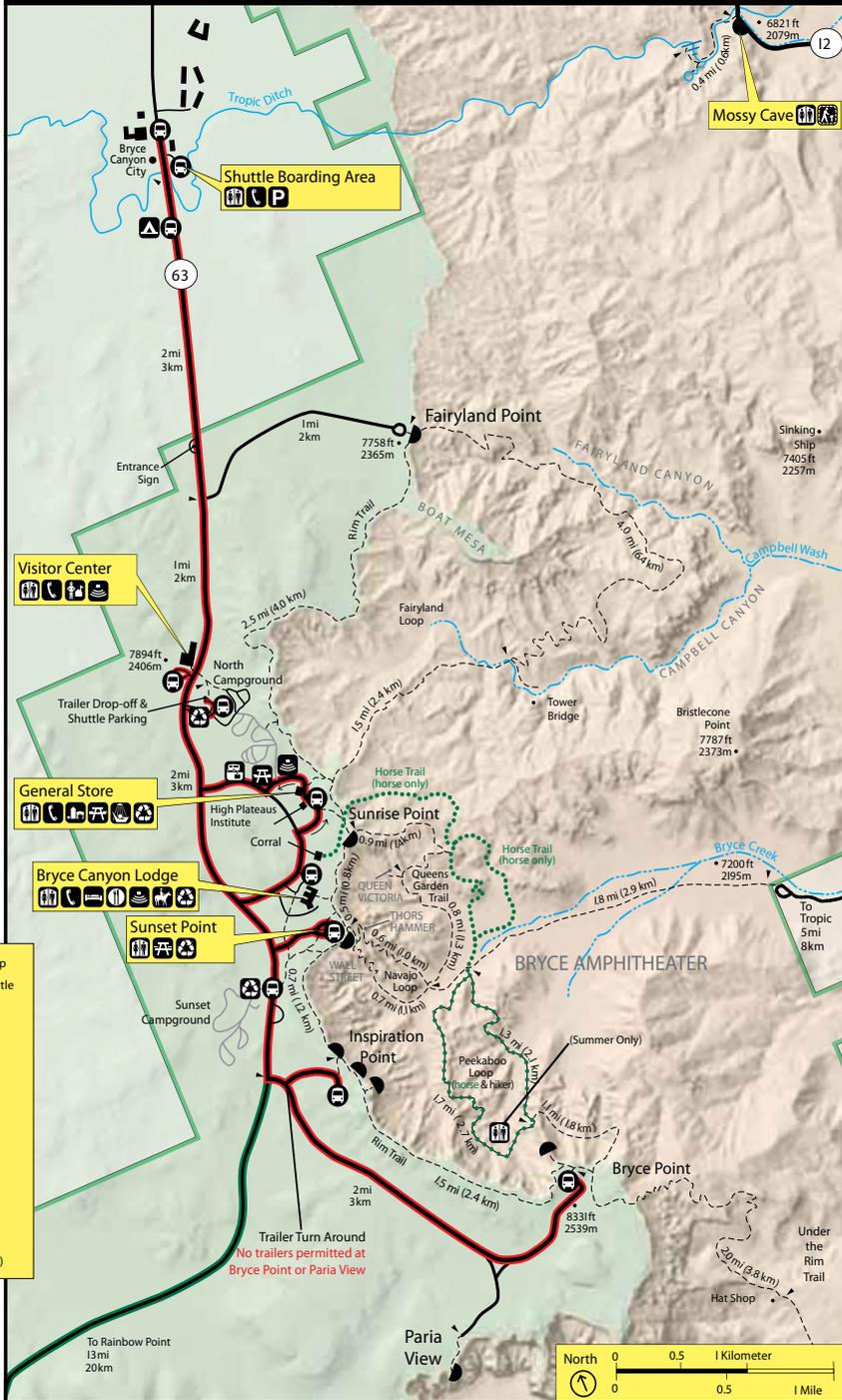
6 The Hoodoo

Bryce Canyon National Park



Hiking the Park

Bryce Amphitheater Region



Hiking Reminders...

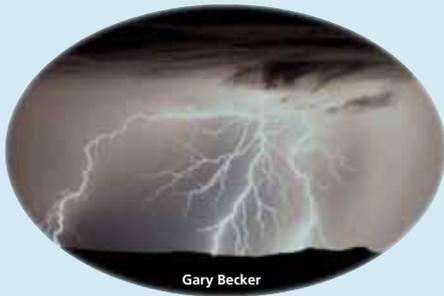
- Wear hiking boots with lug soles and ankle support.
- Carry plenty of water; drink a quart/liter for every 2 to 3 hours of hiking.
- Park elevations reach over 9115 feet (2778 m). Even mild exertion may leave you feeling light-headed and nauseated. Know and respect your own physical limitations.
- Trails with this symbol are used by horses April-October. Horses have right-of-way. Stand on uphill side of trail to let horses pass. Give them warning of your presence. Talk, don't yell.
- Stay on maintained trail. Do not take short cuts.
- Do not feed the wildlife.

Day-Hiking Trail Guide

Where's a Good Hike? Bryce Canyon has 8 different day-hiking trails. Because many of these trails are interconnected, our most popular hikes are combinations of two or more of these basic trails. **If you can only do one hike, the Queens'/Navajo Combination Loop might be the best choice.** Take this page with you while hiking.

TRAIL NAME / STARTING POINT	ROUND TRIP	ELEVATION CHANGE	DESCRIPTION
Easy to Moderate Hikes (gentle grades & minimal elevation change)			
MOSSY CAVE North end of Bryce along Hwy 12 (not a loop)	0.8 mi 1.3 km 1 hour	↑ 200 ft 62 m ↓ 200 ft 62 m	Streamside walk up to a mossy overhang and small waterfall. (Waterfall flows May-October.)
SUNSET TO SUNRISE Sunset Point (not a loop)	1.0 mi 1.6 km 1 hour	↓ 34 ft 10 m ↑ 34 ft 10 m	Paved portion of Rim Trail; fairly level from Sunset Point to Sunrise Point. Sunrise Point overlook NOT wheelchair accessible.
RIM TRAIL Anywhere along rim (not a loop)	1.0-11.0 mi 1.6-17.7 km (you pick start and end points)	↓ 34-1734 ft 10-535 m ↑ 34-1734 ft 10-535 m	Outstanding views of hoodoos from above. Trail is paved and fairly level between Sunset and Sunrise Points.
BRISTLECONE LOOP Rainbow Point	1.0 mi 1.6 km 1 hour	↓ 150 ft 45 m ↑ 150 ft 45 m	Hike through spruce-fir forests to cliffs with bristlecone pines and expansive vistas.
QUEENS GARDEN Sunrise Point (not a loop)	1.8 mi 2.9 km 1-2 hours	↓ 320 ft 98 m ↑ 320 ft 98 m	The least difficult trail into the canyon. See Queen Victoria at the end of a short spur trail.
Moderate Hikes (steep grades with "down & back" elevation change)			
NAVAJO LOOP Sunset Point	1.3 mi 2.2 km 1-2 hours	↓ 550 ft 167 m ↑ 550 ft 167 m	See Wall Street, Two Bridges, and Thors Hammer on this short but steep trail. Clockwise direction recommended.
QUEENS/NAVAJO COMBINATION LOOP Sunset or Sunrise Point <i>World's best 3-mile hike!</i>	2.9 mi 4.6 km 2-3 hours	↓ 580 ft 177 m ↑ 580 ft 177 m	Combine two trails described above with the Rim Trail to form a loop. Clockwise direction recommended.
TOWER BRIDGE North of Sunrise Point (A portion of the Fairyland Loop - not a loop)	3.0 mi 4.8 km 2-3 hours	↓ 950 ft 290 m ↑ 950 ft 290 m	See bristlecone pines and the China Wall. A shady 1/4-mile spur trail leads to the bridge.
HAT SHOP Bryce Point (not a loop)	4.0 mi 6.4 km 3-4 hours	↓ 1336 ft 407 m ↑ 1336 ft 407 m	Descend Under-the-Rim Trail to see a cluster of balanced-rock hoodoos.
Strenuous Hikes (steep grades with MULTIPLE elevation changes)			
FAIRYLAND LOOP Fairyland Point or north of Sunrise Point	8.0 mi 12.9 km 4-5 hours	↓ 2309 ft 704 m ↑ 2309 ft 704 m	See the China Wall, Tower Bridge and tall hoodoos on this spectacular, less-crowded trail.
PEEKABOO LOOP Bryce Point	5.5 mi 8.8 km 3-4 hours	↓ 1555 ft 473 m ↑ 1555 ft 473 m	Steep but spectacular hike through the heart of Bryce Amphitheater. See the Wall of Windows.
NAVAJO/PEEKABOO COMBINATION LOOP Sunset Point	4.9 mi 7.8 km 3-4 hours	↓ 1755 ft 535 m ↑ 1755 ft 535 m	Combine Navajo and Peekaboo Loop Trails into a mini figure-8.
THE 'FIGURE 8' (QUEENS GARDEN/PEEKABOO/NAVAJO COMBINATION) Sunrise or Sunset Point	6.4 mi 10.2 km 4-5 hours	↓ 1785 ft 544 m ↑ 1785 ft 544 m	Combine Queens Garden, Peekaboo Loop, and Navajo Trail into one ultimate hike!
BRYCE AMPHITHEATER TRAVERSE Bryce Point (May to Oct during shuttle operations)	4.7 mi 7.5 km 3-4 hours	↓ 1555 ft 473 m ↑ 580 ft 167 m	Descend from Bryce Point. Turn left (clockwise) on Peekaboo Loop to canyon floor and climb Queens Garden Trail to Sunrise Point. Hike or ride shuttle back.

- Do not throw anything, anywhere, at any time.
- Be respectful of others; keep noise levels down—no yelling.
- Pack out all trash including tissue paper and cigarette butts.
- Pets are not permitted on any unpaved surface or trail.
- Uphill hikers have the right of way.
- Remember, you are entering a wild setting. Ultimately, you are responsible for your safety and the safety of those around you. Take what you bring; leave what you find.



A bolt of lightning contains about a billion volts and can reach 50,000 degrees Fahrenheit! This photo was taken from Sunset Point.

Lightning Safety

Take Lightning Seriously

Summer storms at Bryce Canyon bring lightning, a powerful force which can and does kill. Take a look along the canyon's edge, and you'll soon spot one of the countless trees that have been struck. Don't let that be you!

Here at Bryce Canyon, lightning has claimed the lives of three visitors in the past 18 years. Six other visitors have been seriously injured by lightning strikes.

In the state of Utah, Bryce Canyon is the second most common place for lightning fatalities and injuries, behind the Uinta Mountains. Considering that the park is much smaller in area, Bryce Canyon has the highest lightning hazard density in the state!

Where is it Safe?

The safest place to be is in an enclosed building with walls, roof, and floor (such as the Visitor Center). The next best place is in an enclosed vehicle.

If you can't get to a safe location, avoid the most dangerous places and activities, including higher elevations, wide-open areas, tall isolated objects, water-related activities and open vehicles. **Do not go under trees to keep dry during thunderstorms!**

How Do I Plan for Safety?

In this area, thunderstorms usually occur in the afternoon during July and August. If possible, plan your outdoor activities for the early part of the day. Learn and practice the **30/30 Rule** (see below).

When is it Time to Seek Shelter?

Begin counting as soon as you see a flash of lightning. If you **CANNOT count to 30** (i.e., 30 seconds) between the flash and hearing its thunder, it is unsafe to be outdoors. You should seek shelter immediately.

When is it Safe to Go Back Outside?

It is not safe to be outdoors until at least **30 minutes** after you hear the last thunderclap or see the last flash of lightning.

Don't be fooled by the bright sunshine overhead! Lightning can strike away from the dark clouds. Be alert to new storms developing in the area.

Remember, your safety is YOUR responsibility. Learn the signs of an impending lightning storm. Be willing to alter your visit to make the safe choice. Practice the 30/30 rule.



Fire: A Burning Issue

Perhaps you've noticed scorched trees and other signs of forest fires here at Bryce Canyon. Some fires were started by lightning; many were intentionally set by park managers using a modern ecological practice called prescribed burning.

For millions of years, forest fires have been shaping the globe. In fact, fires were once a common occurrence throughout this area. Before human settlement increased in the late 1800s, lightning frequently started fires which rejuvenated plant growth, recycled soil nutrients, cleared undergrowth, and increased wildlife habitat diversity. Grazing, fire suppression, and other land management practices have altered this natural cycle and created an unhealthy forest with dangerous accumulations of trees and dense underbrush in some areas of the park.



South of Natural Bridge a plume of smoke from the Puma Project rises thousands of feet as visitors review materials provided by the park about wildfire.

A primary mission of the National Park Service is the preservation of dynamic natural processes. At Bryce Canyon, the wise use of fire is an important tool in the effort to restore a healthy balance to our forest ecosystems. Here, fire managers use prescribed fires, which are intentionally ignited under predetermined environmental conditions, to meet a variety of park management objectives. In addition, natural fires ignited by lightning may be allowed to burn under specific conditions within predetermined areas to achieve resource benefits.

During the summer of 2009, Bryce Canyon Fire Management, in cooperation with the Dixie National Forest, successfully managed a naturally ignited fire that burned for three months. The Bridge Fire started June 14, 2009 from a lightning strike on Dixie National Forest lands. The fire burned for one month before it swept into the park atop Whiteman Bench. Evidence of this fire may be seen between mile markers 8 and 10 on the main park road. You may also see it below Swamp Canyon and Farview Point. The Bridge Fire burned a total of 4,759 acres, of which 1,942 were within the park's boundary. This is the largest wildland fire in the park's history. The Bridge Fire was allowed to burn in order to open the forest canopy and forest floor to promote the regeneration of Ponderosa Pine, Quaking Aspen and other native species.



Aerial photo of Puma Project area showing mosaic burn pattern.

In September of 2008, after nearly five years of planning and preparation the Puma Prescribed Burn finally came to fruition. The Puma Burn Unit is located in the southern portion of the park near mile marker 13 on Highway 63 and continues to Rainbow Point at the end of the park road. The project area treated included 2,073 acres in the park and 2,019 acres on Dixie National Forest lands. This project was designed to increase visitor safety by the reduction of hazardous fuels along the park highway through modification of the forest structure. The road to Rainbow Point is located on top of a ridge and is one-way in and one-way out. If a wildfire were to start below the road it could easily cut off the road, thus preventing escape and posing a threat to park visitors.

In addition to visitor safety, a secondary goal was to reintroduce fire to its natural role in the ecosystem. This prescribed burn was conducted under conditions that resulted in a mosaic pattern of fire intensity, some areas burned very hot, while others experienced lower intensity effects. This mosaic burn pattern will result in a variety of habitats and thus provide diversity for many of the park's plants and animals.

Now, upon noticing our blackened trees, we encourage you to also look for deer, elk, Utah Prairie Dogs and countless species of birds that thrive here because of our safe and successful management of fire. The policy of using fire as a tool will help decrease risks to life, property and resources and will help perpetuate the values for which many of our public lands were established. All indications suggest that we are burning our way to a better future!



Smoke plume and flames from the Bridge Fire in July 2009 were easily visible from Swamp Canyon.

Is This Weather Normal?

WEATHER AT BRYCE CANYON	MONTH											
	J	F	M	A	M	J	J	A	S	O	N	D
TEMPERATURE (°F)												
Normal Daily Maximum	39	41	46	56	66	76	83	80	74	63	51	42
Normal Daily Minimum	9	13	17	25	31	38	47	45	37	29	19	11
Extreme High	62	66	76	82	89	96	97	94	91	85	75	67
Extreme Low	-30	-29	-13	-5	5	20	25	17	17	-2	-20	-23
Avg. # of Days that rise above 90 °F	0	0	0	0	0	1	4	0	0	0	0	0
Avg. # of Days that drop below 32 °F	31	28	31	20	20	6	0	9	9	22	29	31
PRECIPITATION (inches)												
Normal	1.7	1.4	1.4	1.2	0.8	0.6	1.4	2.2	1.4	1.4	1.2	1.6
Maximum	9.2	6.8	6.8	3.8	2.3	2.7	3.8	4.8	4.2	4.5	5.4	6.2
Maximum 24 hr. Precipitation	2.3	1.5	1.5	1.8	1.2	1.7	1.8	3.8	3.4	1.7	1.5	3.2
Maximum Snowfall	63	75	75	62	18	6	T	T	4	22	22	49
Days with Measurable Precipitation	7	7	8	6	5	3	5	6	4	4	5	6
Average # of Thunderstorms	0	0	0	1	5	6	14	19	7	2	0	0
SUNSHINE / CLOUDINESS												
Number of Clear Days	9	7	9	10	12	17	16	16	18	17	11	10
Number of Partly Cloudy Days	8	8	8	9	10	8	10	10	8	7	8	8
Number of Cloudy Days	14	13	14	11	9	5	5	5	4	7	8	13
% Possible Sunshine	56	64	60	68	74	83	77	79	80	75	63	60

A Weed By Any Other Name...

As you drive along Bryce Canyon's scenic roadways or hike any of the trails, you may see Bryce Canyon's revegetation crew and volunteers hard at work. They're identifying and documenting information such as species, location, and size of exotic vegetation infestations; manually pulling non-native plants; conducting erosion control measures on steep slopes; and revegetating disturbed soils.

Bryce Canyon has currently documented 73 exotic plant species that have been in the park at one time. How did these "weeds" become established here? Wildlife may have played a small role. Animals with large ranges such as mule deer, black bears, and mountain lions can bring in exotic plant seeds embedded in their fur. Birds may eat berries and seeds that, when passed through their digestive systems and excreted, can sprout exotics. Rodents may cache seeds for winter use in various locations, thus spreading the seed base. Probably more significant, though, is the role that humans play in this cycle. For instance, the revegetation crew is working to ensure that soils disturbed by road construction activities are repopulated with native, rather than exotic invasive species. Clothing and boot soles carry and spread non-native seeds into the backcountry, and vehicles do the same along roadways. How can you help prevent the loss of native plant diversity to invasive species at Bryce Canyon? Scraping boots and cleaning the undercarriages of vehicles prior to entering the park will help.



When driving, stay alert for park employees working along the roadsides. Give them a brake!

Once identified, exotic species are eradicated using a number of techniques, including manual (hand-pulling and chopping), mechanical (chainsaw), fire, and - as a last resort - chemical means. Sometimes a combination of techniques is utilized such as in the case of tamarisk, *Tamarix ramosissima*. Small tamarisk plants can be pulled by hand if care is taken to remove the entire taproot. However, larger trees must be cut with a chainsaw, and the stumps treated with chemical herbicides to prevent resprouting. Tamarisk favors fragile riparian areas and outcompetes native species due to its rapid growth rate, deep taproots, and salt secretions that create a hostile environment for native plants.

Along the park's roadsides, our crew is planting and reseeding soils with native plants. To prevent roadside weeds from becoming established, the crew will reseed with native seeds and transplant native shrubs, trees, and grasses. Seeds gathered from grasses and forbs native to the Paunsaugunt Plateau were sent to a nursery in Meeker, Colorado, in order to produce the number of seeds needed for the area of coverage.

Erosion control has also been undertaken along the road. You may have seen the "waddles" (straw-filled, net-covered cylinders that are certified weed free) staked into the bare hillsides. Waddles prevent topsoil from sloughing downhill or being washed down drainage ditches until roots from the reseeding efforts take hold and naturally bind the soil.



Spotted knapweed is one of 73 exotic plant species in the park.

Help Stop Animal Cruelty

Feeding wild animals is a classic example of how good intentions can unwittingly cause serious harm. In fact, feeding wildlife is actually a form of animal cruelty!



Fed animals frequent roads and parking lots where they are much more likely to get run over by cars. Furthermore, wild animals have very strict natural diets and therefore very specific types of digestive bacteria. Human food causes the wrong type of digestive bacteria to become dominant. Soon, fed animals can no longer digest their natural foods and ultimately will starve to death with full stomachs. What could be more cruel?

Fed animals will even teach their offspring to beg for food. These young animals may never learn the necessary skills to find natural foods and grow up totally dependent on humans for survival. The act of feeding wildlife can also be dangerous to people. Rodents are notorious for transmitting diseases. You put yourself in jeopardy every time you get within flea-jumping distance 6-9 feet (2-3 m) of a squirrel or prairie dog. Worse yet, feeding can cause normally docile animals, like deer, to become aggressive. In one sad instance at Yosemite National Park, a young child was gored and killed by a "spike" deer buck when he refused to relinquish his sandwich to the animal.

Unfortunately, once animals become habituated to humans, their behavior often leads to management actions that may result in their removal from the park.

Giving in just once to the big, brown, pleading eyes of a cute animal can have major consequences. Be responsible. Learn to be a friend of wildlife by not trying to befriend animals with food.

Please spread the word. True animal lovers don't feed wild animals. Help protect your national parks.

Please do not feed the animals!
Bitte nicht die Tiere füttern!
Ne donnez pas à manger aux animaux!
¡No dé comida a los animales!



Protecting Natural Darkness



Earth at night. Researchers estimate less than half the residents of the Northern Hemisphere can see the Milky Way.

Losing Afraid of the Dark?

Some people are afraid of the dark. Interestingly, Bryce Canyon's park rangers are scared of the light! Perhaps you'd be fearful, too, if it was your job to protect some of the best dark left in the world.

Preserving darkness isn't easy. Education is our best tool, as Bryce Canyon's biggest threats to darkness come from outside its boundaries. Protecting the dark requires using light wisely. Light that shines down is often necessary; however, light that escapes sideways or upward only pollutes the night and dims the stars. Many municipalities have found that by switching to shielded light fixtures, they can more effectively illuminate neighborhoods with less electricity. This not only reduces light pollution, but their residents' tax burden, as well.

Being far from civilization, Bryce's night skies are not only dark, but our high desert location makes our thin air very easy to see through. Consequently, this is a phenomenal place for stargazing. With a limiting magnitude rating of 7.4, Bryce's sky is as dark as world class astronomical research locations. By comparison, a moonless night in a small town setting rates at a 6.0 magnitude, where 2500 individual stars can be seen twinkling in the void. But here at Bryce, 7500 are visible to the unaided eye!

As darkness falls, the first star may actually be the planet Venus, shining so brightly at Bryce it will cast your shadow. Venus is soon followed by Vega, Arcturus, and other bright stars. When the transition from light to dark is complete, look for the combined light of billions of stars all so distant they appear as one long cloud stretching across the sky.

Behold, the Milky Way! This stellar strip of light is only a portion of our galaxy, which contains 200 billion stars.

In most places it's never dark enough to see, but at Bryce, only hours after sunset, your eyes will be able to see 2.2 million light years to the Andromeda Galaxy. Near the hind legs of the constellation Pegasus you will discover this fuzzy cloud that astronomers know as M31. Andromeda is simultaneously the largest and most distant object you will ever see with your unaided eye, measuring 110,000 light years in diameter!

At Bryce, the Andromeda Galaxy is just the beginning. From the vantage point of this sanctuary of darkness, a universe of stellar wonders awaits. Join park rangers for one of our popular astronomy programs where you can marvel at all the heavens have to offer. Before being veiled by the light pollution of the modern world, these deep sky objects were once visible everywhere. Now over much of the planet they are hard to detect. It is estimated that less than half of the residents of the northern hemisphere can even see any of the Milky Way!

It is easy to feel insignificant underneath such vastness, yet ironically, it is within an individual's power to help preserve such a view. Close your blinds at night and replace porch lights with motion sensor security lights. Become involved in local efforts to establish good lighting. Who knows? Perhaps your home town has the potential for Bryce Canyon quality stargazing. In most places, all it takes to restore the heavens is a shared passion for the dark and the unified responsible management of light.

Astronomy Program Schedule (Most Tuesdays, Thursdays & Saturdays)

May 15	June 1	July 1	August 3	September 2
May 18	June 3	July 6	August 5	September 4
May 20	June 5	July 7-10	August 7	September 7
May 22	June 8	July 13	August 10	September 9
May 25	June 10	July 15	August 12	September 11
May 27	June 12	July 17	August 14	September 14
May 29	June 24	July 20	August 17	September 16
	June 24	July 22	August 19	September 18
	June 26	July 24	August 21	September 21
	June 29	July 27	August 24	September 23
		July 29	August 26	September 28
			August 28	September 30
			August 31	

Always check at the Visitor Center for program location and start time. This is only a partial list and subject to change. **The 2010 Bryce Canyon Astronomy Festival dates are July 7-10.**

The Bryce Canyon astronomy team will be giving astronomy programs at other locations in the local area on Friday evenings. Check at the Visitor Center for details.

Stargazing is weather permitting and can be very cold. Bring warm clothes. Temperatures may dip down as low as 40° F / 4° C!

Full Moon Hike Schedule

May 26	June 25	July 26	August 24	September 23
May 27	June 26	July 27	August 25	September 24



Park rangers and volunteers offer astronomy programs three times a week in summer. These popular programs include an indoor multimedia presentation followed by telescope viewing of the heavens (weather permitting).

Bryce Canyon Natural History Association

PO Box 640051, Bryce, UT 84764-0051 888-362-2642 Fax 435-834-4606 www.brycecanyon.org

Established in 1961, Bryce Canyon Natural History Association is a non-profit organization dedicated to assisting Bryce Canyon National Park and Dixie National Forest in furthering their scientific, educational, historical, and interpretive activities. This is accomplished, in part, by making educational publications and materials available for sale and/or free distribution, and supporting existing interpretive activities, like the Junior Ranger Program.

Every purchase from a Bryce Canyon Natural History Association bookstore helps support our mission.

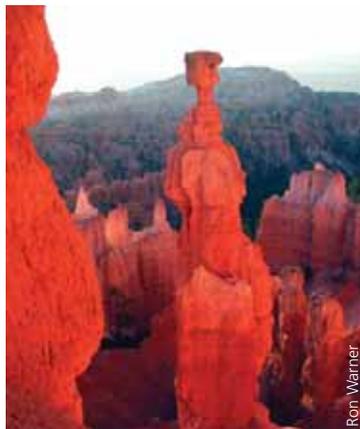


As a Natural History Association member, you can help us:

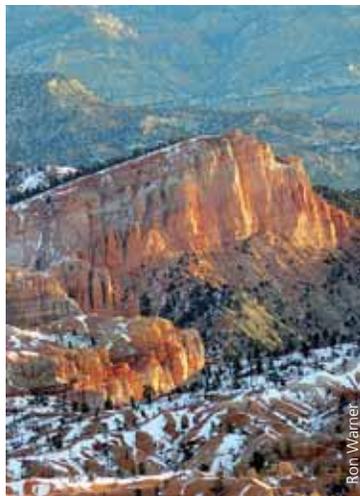
- Publish nearly a half million pieces of free literature for park visitors each year.
- Support resource management research activities.
- Support educational outreach programs to schools in southern Utah and beyond.
- Continue National Park Service research projects that document the natural and human history of Bryce Canyon National Park.
- Support the Junior Ranger Program.
- Help publish interpretive books, maps, posters, and audio-visual products that educate visitors about Bryce Canyon National Park and Dixie National Forest.
- Support the Bryce Canyon Interpretation Division of the National Park Service.
- Provide scholarships to deserving students and universities.

A membership with Bryce Canyon Natural History Association includes these benefits:

- 15% discount on all books, maps, posters, and other products sold by Bryce Canyon Natural History Association in our stores, by phone (888 362-2642), or online (www.brycecanyon.org).
- Discounts to hundreds of other stores operated by more than 60 nonprofit cooperating associations at numerous national parks and other public lands throughout the United States (you must present your membership card to receive discount).
- Bryce Canyon Natural History Association members receive a discount on most High Plateaus Institute courses. These courses offer in-depth outdoor education to visitors. Call or check our website for listings.



Become a personal partner with Bryce Canyon National Park to help preserve and protect the wonder and resources for this and future generations.



High Plateaus Institute



In the spring of 2004, the Bryce Canyon Natural History Association and Bryce Canyon National Park, in collaboration with the local business community, school officials, universities, and city, county, state and federal government entities, initiated efforts to facilitate the inaugural year of the High Plateaus Institute (HPI). This exciting educational endeavor provides researchers, students, teachers, local residents, and visitors with expanded opportunities for exploration, discovery, and science-based learning.



High Plateaus Institute, Bryce Canyon National Park

Many exciting educational programs have been offered through the HPI including geology, astronomy, plants, wildlife, cultural history (ranching and cowboy poetry) and photography. The HPI plays host to a variety of researchers each year, as well as providing a location for ranger-led programs for kids and families.

For further information, contact the BCNHA Education Specialist at (435) 834-4784 or email marilynbc@scinternet.net.

Thank You to Our Donors & Partners

Bryce Canyon National Park wants to thank its generous donors and park partners for helping to improve programs and services here at the park.

The **Bryce Canyon Natural History Association** provides the park with booklets and badges for the Junior Ranger program, printing costs for this **Hoodoo newspaper** and other publications, and housing for Volunteers and interns. The Association also funds a full time Education/Outreach Specialist for the park.

The **donation box** in the lobby of the visitor center has funded interpretive equipment that directly benefits the visiting public. A "state of the art" projector for the visitor center auditorium was purchased in 2007.

In 2008, two Geoscientist-in-Parks interns were funded by the **Geologic Society of America**. These interns assisted with research, presented public geology programs throughout the summer, and provided training for park staff on the geology of the Colorado Plateau. Our Natural History Association also helped to fund these two positions.

The **Bryce Canyon Lodge** and **Ruby's Inn Resort** have implemented a Dollar Check-Off Program. Guests at their hotels have the option of donating a dollar per night of their visit. These programs have funded seasonal employees for interpretation and the trail crew.

A hearty "thanks" to our generous donors and park partners. We couldn't do it without you!

V.I.P.s (Volunteer-In-Parks)

Last year, more than 280 volunteers donated over 28,000 hours to Bryce Canyon National Park! If **you've** got time and talents to share, why not become a Volunteer-In-Park (V.I.P.)?

For more information, log on to: www.volunteer.gov/gov.

To learn more about our astronomy volunteer program, log on to: www.nps.gov/bcrca/planyourvisit/astronomyvolunteer.htm.

How do I drive to...?

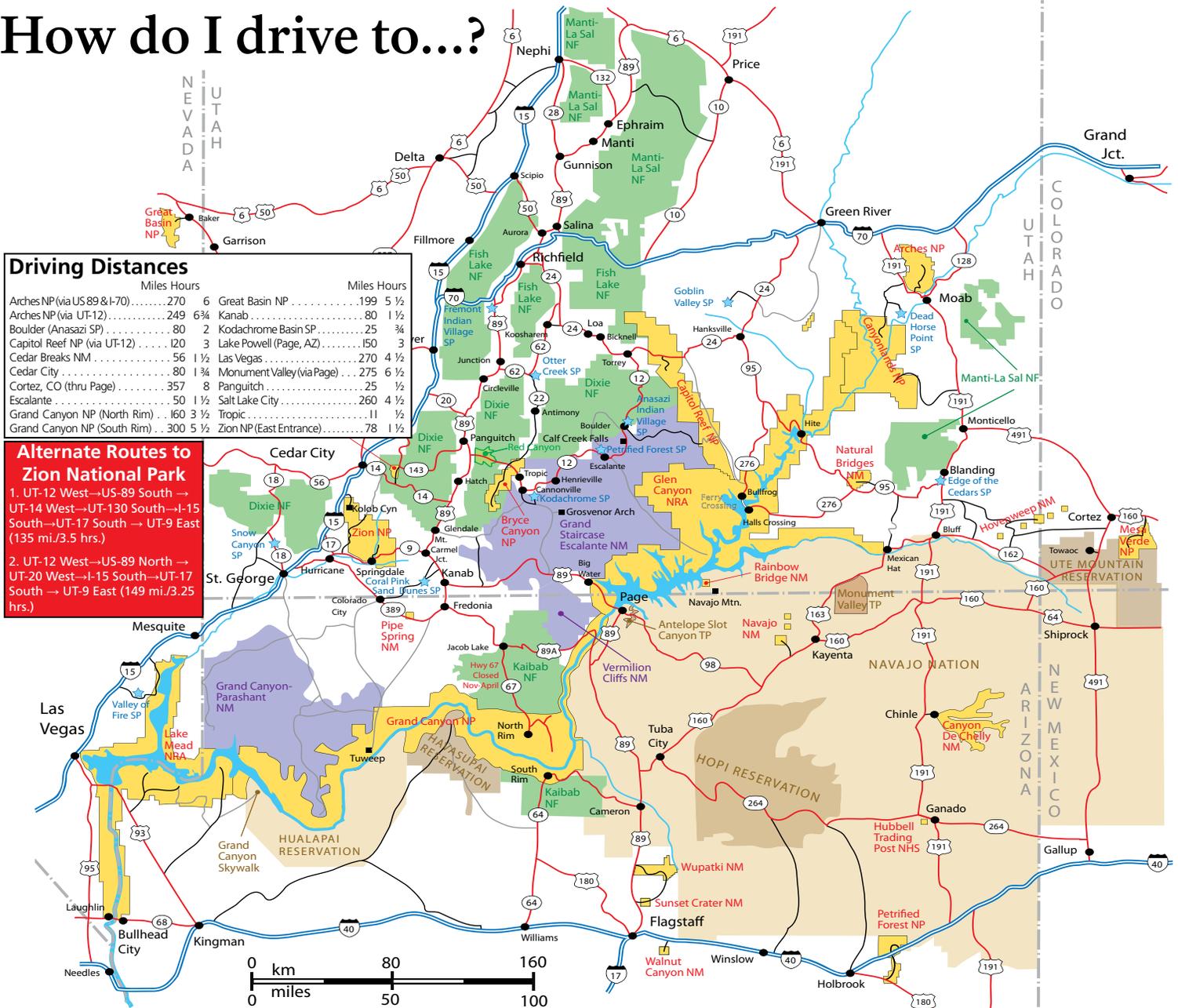
Driving Distances

Miles	Hours	Miles	Hours
Arches NP (via US 89 & I-70)	270	6	5 1/2
Arches NP (via UT-12)	249	6 3/4	1 1/2
Boulder (Anasazi SP)	80	2	3/4
Capitol Reef NP (via UT-12)	120	3	3
Cedar Breaks NM	56	1 1/2	4 1/2
Cedar City	80	1 3/4	6 1/2
Cortez, CO (thru Page)	357	8	25 1/2
Escalante	50	1 1/2	4 1/2
Grand Canyon NP (North Rim)	160	3 1/2	11 1/2
Grand Canyon NP (South Rim)	300	5 1/2	78
Great Basin NP	199	5	1 1/2
Kanab	80	2	3/4
Kodachrome Basin SP	25	3/4	
Lake Powell (Page, AZ)	150	3	
Las Vegas	270	4	1 1/2
Monument Valley (via Page)	275	6	1 1/2
Panguitch	25	3/4	
Salt Lake City	260	4	1 1/2
Tropic	11	1/4	
Zion NP (East Entrance)	78	1 1/2	

Alternate Routes to Zion National Park

1. UT-12 West → US-89 South → UT-14 West → UT-130 South → I-15 South → UT-17 South → UT-9 East (135 mi./3.5 hrs.)

2. UT-12 West → US-89 North → UT-20 West → I-15 South → UT-17 South → UT-9 East (149 mi./3.25 hrs.)



Capitol Reef National Park
121 miles northeast via Utah 12 & 24

The Waterpocket Fold, a giant wrinkle in Earth's crust, features a jumble of colorful cliffs, massive domes, soaring spires, twisting canyons, and graceful arches. Ancient rock art and historic orchards tell of the park's cultural history. Orchards are open June - October for "self-serve picking" of cherries, pears, apricots, peaches, and apples. Visitor Center: 435-425-3791 www.nps.gov/care



Cedar Breaks National Monument
83 miles west via Utah 12, US 89 & Utah 14

At 10,350 feet (3155 m), Cedar Breaks is the highest Park Service unit and features a spectacular amphitheater of walls, fins, spires, and columns eroded out of colorful Claron limestone. Forests of pine, spruce, fir, and aspen are separated by alpine meadows ablaze with brilliant summer wildflowers. Temperatures are usually cool. Headquarters: 435-586-9451 www.nps.gov/cebr



Grand Staircase-Escalante Nat'l Monument
South and east via Utah 12 & US 89

Administered by the Bureau of Land Management, this 1.9 million acre area features diverse and ruggedly beautiful landscapes. Utah 12 and US 89 skirt the fringes of the monument and offer numerous scenic pull-outs. All of the roads in the monument's interior are unpaved, and many require 4-wheel drive. Escalante Visitor Center: 435-826-5499 Cannonville Visitor Center: 435-679-8981 Kanab Headquarters: 435-644-4600 www.ut.blm.gov/monument



Red Canyon / National Scenic Byway 12
124-mile route between US 89 & Utah 24

National Scenic Byway 12 stretches 124 miles from Red Canyon to Capitol Reef National Park and provides breathtaking views across the Grand Staircase and into the Escalante Canyons. The Federal Highway Administration designated this route an "All-American Road," making it a "destination unto itself." Ask for a Byway 12 Route Guide at any visitor center along the way.