



The Guide

North Rim: 2006 Season
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Español, Italiano, 日本語

Celebrate Life's Diversity

The North Rim is a celebration of the diversity of life found within Grand Canyon National Park. The lush, green meadows and forests of the Kaibab Plateau provide lessons on survival, renewal, and solitude in wildness.

The isolation of the North Rim has created a home for unique plants and animals. The shy Kaibab squirrel, an example of evolutionary change through geographic isolation, is easily identified by its charcoal-gray body, distinct tufts of fur on the tips of the ears, and its pure white tail. Its close relative, the Abert squirrel, inhabits the South Rim and other areas of the Southwest. All tassel-eared squirrels depend on healthy, mature ponderosa pine communities for their survival.

Fire is a key for healthy ponderosa pine forests. Low-intensity fires burn debris on the forest floor and return nutrients to forest soils promoting new growth. Evidence of recent fires is visible on the North Rim. In areas touched by fire, aspen seedlings push their way through the darkened earth. The new growth attracts wildlife, and the forest cycle continues.

The highest elevations on the Kaibab Plateau, between 8,000 and 9,100 feet (2,440–2,770 m), are home to a community similar to the boreal forests of northern Canada. Spruce and fir found in this environment add to the diversity of life on the North Rim. Deer, mountain lions, coyotes, turkeys, and hummingbirds inhabit the forests and travel through



Meadows dot the Kaibab Plateau. NPS photo

meadows thick with wildflowers during the summer season.

The forests of the Kaibab Plateau change with the seasons. Average annual rainfall is approximately twenty-six inches (66 cm), including 150 inches (380 cm) of snow in winter. Precipitation is equally divided between dramatic summer monsoons, which bring heavy, but usually brief, thundershowers, and winter snowstorms. Snow closes the road from late-November to May, providing solitude for adventurous cross-country skiers and winter hikers.

Experience the wild and remote feeling of the North Rim. Solitude can be found by hiking the trails, exploring the roads, and enjoying

an awe-inspiring view. Enjoy, discover and celebrate the diversity that is found on the North Rim.



Kaibab squirrel. NPS photo



Red maples of fall glow on rugged canyon slopes. NPS photo

Mountain Standard Time



What Time Is It?

Arizona remains on Mountain Standard Time (MST) year-round. Daylight Savings Time is not observed, except on the Navajo Reservation.



North Rim Map on page 8

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Use Caution Near the Edge!

Footing can be dangerous.

Maximum Speed 45 mph










Emergency • 911

24 hours-a-day
Dial 911 from any phone
9-911 from hotel phones

Ranger Programs

During your visit to the North Rim of Grand Canyon National Park, the National Park Service encourages you to enjoy these free programs. Rangers recommend wearing a hat and sunglasses

North Rim

Activity	Meeting Place	Dates Given	Time	Duration	Frequency
Nature Walk  <p>Learn about the natural processes that sustain ponderosa pine and aspen forests. A relaxed 1.5 mile (2.4 km) walk with some elevation gain and loss.</p>	North Rim Visitor Center	May 28–Oct. 15	8:30 a.m.	1 1/2 hours	Daily
Into the Past   <p>How did people at Grand Canyon survive hundreds and even thousands of years ago? Discover the powerful ties between people and place. Program includes a tour of an excavated ancestral Puebloan site.</p>	Walhalla Overlook parking lot (45 minutes from Bright Angel Point)	June 11–Sept. 16 Aug. 20–Sept. 16	2:00 p.m. 11:30 a.m.	45 min. 45 min.	Daily Daily
Condor Talk   <p>What has a 9 1/2-foot (3 m) wingspan and a face only a mother could love? The California condor. Come discover the life and death story, and the science that saved this incredible bird.</p>	Fireplace on back porch of Grand Canyon Lodge	May 28–Oct 14	2:00 p.m.	30 min.	Daily
What's Rockin'—Grand Canyon Geology   <p>Why is the Grand Canyon in Arizona and not in your backyard? Enjoy a 1/2-hour talk with a ranger and then test your new skills with a short, optional stroll to Bright Angel Point. Bright Angel Point is not easily accessible to wheelchairs.</p>	Fireplace on back porch of Grand Canyon Lodge	May 16–Oct. 14	4:00 p.m.	1 hour	Daily
Campfire Program   <p>Programs cover some aspect of the Grand Canyon story. Topics are posted in the campground, lodge, and visitor center.</p>	Campground amphitheater	May 28–Sept. 16	7:00 p.m.	35–45 min.	Daily
Evening Program <p>A variety of programs explore the scenic, scientific, and cultural aspects of this special landscape. Nightly topics are posted in the lodge, visitor center, and campground. Arrive 15 minutes early for an "Ask the Ranger" discussion.</p>	Grand Canyon Lodge auditorium	May 19–Oct. 13	8:00 p.m.	35–45 min.	Daily

Artist-in-Residence Program



The wonder and majesty of Grand Canyon has been preserved and celebrated in many ways—through photography, music, painting, sculpture, and the written word. Artists frame our heritage in literature and images for those who visit now, those who will come in the future, and those who will know the park only through this artistic legacy.

The Artist-in-Residence program offers professional artists the opportunity to spend three weeks living and working on the North Rim. While here, and in the months following, the artist creates a body of work that fosters an understanding of the need to preserve this inspiring natural and cultural resource. The artist also shares his or her inspiration with park visitors through public programs and demonstrations.

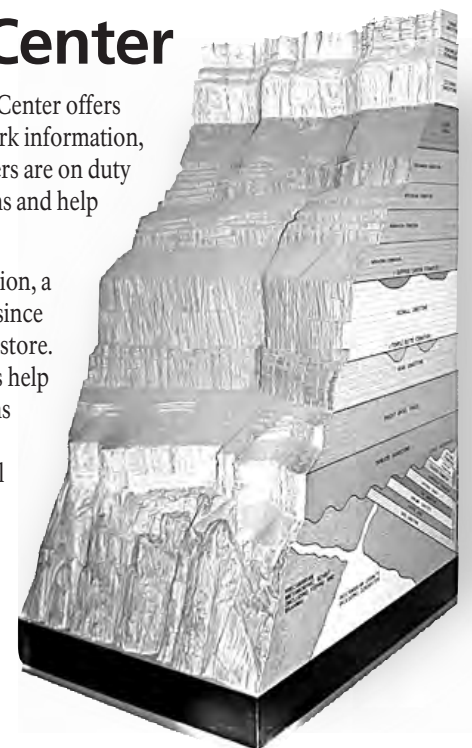
Attend an Artist-in-Residence program, should one be offered during your stay. If the Artist-in-Residence program interests you, pick up an application at the North Rim Visitor Center or call (928) 638-7739; (928) 638-7818 during winter.

Visitor Center

The North Rim Visitor Center offers interpretive exhibits, park information, and a bookstore. Rangers are on duty to answer your questions and help you with your visit.

Grand Canyon Association, a nonprofit park partner since 1932, operates the bookstore. Your tax-free purchases help support ranger programs and research projects in Grand Canyon National Park.

Open daily 8:00 a.m. – 6:00 p.m.



and bringing water to all daytime programs due to the high elevation and arid conditions. Please check times and frequencies carefully to insure that you participate in the programs that interest you. All times are Mountain Standard Time. We hope that learning about Grand Canyon National Park will lead to a greater appreciation of your national park.

North Rim, continued

Activity	Meeting Place	Dates Given	Time	Duration	Frequency
Night Watch ⚡					
Experience starry skies, night sounds, and moonlight. Depending on the weather, programs may focus on astronomy, night adaptations, or storytelling. Dress warmly and bring a flashlight.	Fireplace on back porch of Grand Canyon Lodge	May 28–July 31	9:15 p.m.	45 min.	Daily
		Aug. 1–Sept. 16	9:00 p.m.	45 min.	Daily
Special Programs					
From time to time it is possible to present additional programs on topics of special interest. Announcements for these programs will be posted at the visitor center.					
Got Kids?					
Discovery Pack Junior Ranger Program ♿ ⚡ 👤					
Explore the wonders of Grand Canyon ecology with your family. Attend the program, then check out a “Discovery Pack” for the day. Participants, ages 9–14, can earn a Junior Ranger Certificate and badge. Limited to 10 families.	Visitor Center	June 11–Aug. 19	10:30 a.m.	1 hour	Daily

Note: Children must be accompanied by an adult on **all programs**, including **Discovery Pack**.



All outdoor programs are subject to cancellation during rain, snow, or lightning storms.



These programs are wheelchair accessible with assistance. Wheelchairs are available for loan at the visitor center.



These family-oriented programs are ideal for meeting the ranger program requirement for the Grand Canyon’s Junior Ranger award. Any ranger program, however, will meet the requirement on page 2 of the Junior Ranger Activity Booklet.

Grand Canyon National Park Foundation

The Grand Canyon National Park Foundation is a nonprofit organization that preserves, protects, and enhances Grand Canyon National Park by promoting citizen stewardship through philanthropy, volunteerism, and public education. In the past several years, the foundation has raised more than \$8 million to support a variety of projects and programs:



- The first segments of the Greenway biking and pedestrian trails—all wheelchair accessible.
- Renovation of historic buildings and historic boats.
- Critical research and support for condors, mountain lions, native plants, and other species.
- Environmental education programs.
- A fellowship program for university students pursuing careers in natural resource management.

Learn about the full range of our work and how you can be involved by visiting www.gcnpf.org, calling (928) 774-1760, or writing: Grand Canyon National Park Foundation, 625 North Beaver Street, Flagstaff, AZ 86001.

By working together, we continue to ensure that this World Heritage Site is forever grand



Would you like to be a Junior Ranger?

Grand Canyon National Park offers a Junior Ranger program for children ages 4–14.

To take part in the program, pick up a Junior Ranger booklet at the North Rim Visitor Center and complete the activities listed for the appropriate age level.

Once completed (don’t forget attendance at one or more ranger programs is mandatory) bring the booklet back to the visitor center to receive an official Junior Ranger certificate and badge.

Enjoying the North Rim

Personalize Your Grand Canyon Experience

There's not one preferred way to experience Grand Canyon. Individual interests, available time, and the weather can all influence a visit. The following list of activities is provided to assist you in personalizing your Grand Canyon experience. Refer to the map on page 8 to locate places mentioned below.

Activity	Option
Drop in at the Visitor Center Near Grand Canyon Lodge	<ul style="list-style-type: none"> • Open 8:00 a.m.–6:00 p.m. • Talk with a ranger. • Enjoy the new interpretive exhibits.
Attend Free Ranger Programs	<ul style="list-style-type: none"> • Walks and presentations are listed on pages 2–3. • All programs are free.
Drive to Point Imperial 11 miles /18 km one-way. 20 minute drive one-way.	<ul style="list-style-type: none"> • Highest point on either rim (8,803 feet /2,684 m). • Spectacular views of Mt. Hayden, Saddle Mountain, and Marble Canyon. • View a landscape changed by fire.
Drive to Cape Royal 23 miles /37 km from the visitor center. 45 minute drive one-way.	<ul style="list-style-type: none"> • Walk the nature trail to view the Colorado River. • Visit Angels Window overlook. • Stop at scenic overlooks along the way. • View ancestral Pueblo structure at Walhalla Overlook.
Walk to Bright Angel Point 0.5 mile / 0.8 km round-trip.	<ul style="list-style-type: none"> • See and hear Roaring Springs. • Excellent views of the South Rim, side canyons, and the distant San Francisco Peaks.
Bicycling	<ul style="list-style-type: none"> • Permitted on paved and dirt roads unless posted. • Prohibited on all trails, except the Bridle Trail. • Roads can be congested. Bicycle safely. Wear a helmet. Ride single-file.
Hiking	
– Walk the rim trails	<ul style="list-style-type: none"> • Transept, Widforss, others. See page 9 for details.
– Day hike into Grand Canyon	<ul style="list-style-type: none"> • Even a short hike down the North Kaibab Trail will impress you with the enormity of the canyon. • Plan on taking twice as long to hike up as it does to hike down. • Do not attempt to hike to the river and back (28 mi./45 km) in one day.
– Backpacking overnight	<ul style="list-style-type: none"> • Permit and fees are required. See page 10 for details.

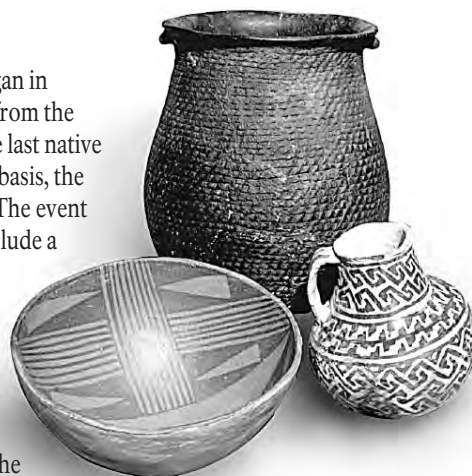
North Rim Heritage Days

The thirteenth annual Heritage Days will honor Grand Canyon's original inhabitants and others who have contributed to its colorful history on August 11, 12, and 13.

Featured will be talks about the use of the natural resources of the canyon by native groups and individuals, cultural practices, and present day customs. In addition, individuals will present crafts and skills demonstrations and lead nature walks.

The original Heritage Days began in 1994 and featured individuals from the Kaibab Band of the Paiutes, the last native group to occupy on a seasonal basis, the North Rim of Grand Canyon. The event has grown over the years to include a variety of presenters.

Watch for announcements during August. Heritage Days is always a popular event and it reminds us that Grand Canyon National Park is also home to the original "locals" of the Colorado Plateau.



Scenic Viewpoints of the North Rim



The three developed viewpoints on the North Rim offer a sense of looking across the expanse of the canyon, rather than into its depths. Views of the Colorado River are rare and distant. These descriptions may help you to plan your visit.

Point Imperial and Cape Royal are reached via a winding scenic drive. The trip to both points, with short walks at each and several stops at pullouts along the way, can easily take half a day. Refer to the day-hiking map on page 8 for additional exploring opportunities along this drive.

Point Imperial, the highest point on the North Rim at 8,803 feet (2,683 m), overlooks the Painted Desert and the eastern end of Grand Canyon. Here the canyon transforms as the narrow walls of Marble Canyon, visible only as a winding gash, open dramatically to become "grand." Layers of red and black Precambrian rocks, not visible at Bright Angel Point, add contrast and color. Part of the viewpoint is accessible.

Cape Royal provides a breathtaking panorama up, down, and across the canyon. With seemingly unlimited vistas to the east and west, it is popular for both sunrise and sunset. The sweeping turn of the Colorado River at Unkar Delta is framed through the natural arch of Angels Window. Look for the Desert View Watchtower across the canyon on

the South Rim. This popular viewpoint is accessible via a paved, level trail.

It takes a bit of effort, and four-wheel drive, to reach **Point Sublime**, the western-most of the North Rim viewpoints. The rough, two-hour (one-way) trip to this remote point is rewarded by a view that lives up to its name. Inquire about road conditions and possible closures before heading out.

Most visitors make a stop at **Bright Angel Point**, at the southern end of the entrance road. From the parking area it is a short, easy walk to Grand Canyon Lodge and a classic view of the canyon. This facility is wheelchair accessible. A paved, narrow half-mile (round-trip) trail leads from the lodge, out the spine of the ridge, to the point. This trail is steep in places, with drop-offs and stairs, but provides dramatic views into Roaring Springs and Bright Angel canyons.

Above: The view from Point Imperial is dominated by Mt. Hayden. NPS photo

Enjoying the North Rim

Sunrise & Sunset

Date	Sunrise	Sunset
May 10	5:27 a.m.	7:24 p.m.
May 14	5:23 a.m.	7:27 p.m.
May 21	5:18 a.m.	7:32 p.m.
May 28	5:15 a.m.	7:39 p.m.
June 4	5:12 a.m.	7:42 p.m.
June 11	5:11 a.m.	7:45 p.m.
June 18	5:11 a.m.	7:48 p.m.
June 25	5:13 a.m.	7:49 p.m.
July 2	5:16 a.m.	7:49 p.m.
July 9	5:19 a.m.	7:48 p.m.
July 16	5:24 a.m.	7:45 p.m.
July 23	5:29 a.m.	7:41 p.m.
July 30	5:34 a.m.	7:35 p.m.
Aug. 6	5:40 a.m.	7:29 p.m.
Aug. 13	5:45 a.m.	7:21 p.m.
Aug. 20	5:51 a.m.	7:12 p.m.
Aug. 27	5:56 a.m.	7:03 p.m.
Sept. 3	6:02 a.m.	6:53 p.m.
Sept. 10	6:07 a.m.	6:43 p.m.
Sept. 17	6:13 a.m.	6:33 p.m.
Sept. 24	6:18 a.m.	6:22 p.m.
Oct. 1	6:24 a.m.	6:12 p.m.
Oct. 8	6:29 a.m.	6:02 p.m.
Oct. 15	6:35 a.m.	5:53 p.m.
Oct. 22	6:42 a.m.	5:44 p.m.
Oct. 29	6:48 a.m.	5:36 p.m.

All times are Mountain Standard Time.

Full Moon

Date	Moonrise
May 12	7:18 p.m.
June 11	8:23 p.m.
July 10	8:04 p.m.
Aug. 8	7:24 p.m.
Sept. 7	6:57 p.m.
Oct. 6	5:52 p.m.

Avoid Shocking Experiences

Lightning strikes on the North Rim of Grand Canyon are a common occurrence and extremely dangerous. Stay away from exposed rim areas during thunderstorms. Hair standing on end is a warning. It signals that an electrical charge is building near you and that lightning may strike. Move away from the rim immediately! The safest place to be during a storm is inside a vehicle with the windows closed or in a building. Avoid touching anything metal. For further information, *Lightning Awareness* brochures are available at the visitor center.

Tuweep / Toroweap



What a conflict of water and fire there must have been here! Just imagine a river of molten rock running down into a river of melted snow. What a seething and boiling of the waters; what clouds of steam rolled into the heavens!
—John Wesley Powell

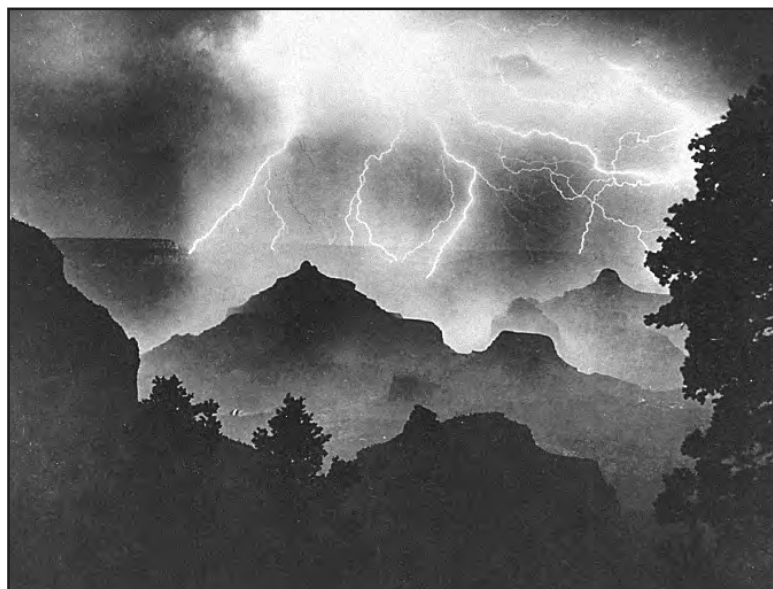
The view from Toroweap Overlook, 3,000 feet (900 m) above the Colorado River, is breathtaking; the sheer drop, dramatic! Equally impressive are the volcanic features, cinder cones and lava flows, which make this viewpoint unique. While

offering one of the most frequently published views of the canyon, this remote and isolated section of the park, known as either Tuweep or Toroweap, is seldom visited.

A trip to this area can be challenging, but rewarding. Since the National Park Service manages the area for its primitive values, improvements and services are minimal. No gas, food, water, lodging, garbage collection, or other services are provided. The primitive campground with eleven sites offers picnic tables, fire grates, and composting toilets, but no water, electricity, or garbage collection.

Spring and fall are the favored times to visit Tuweep, as the summer months can be hot. All routes are secondary county roads, graded occasionally and generally in good condition, but may be impassable after heavy rains. The Sunshine Route (BLM Road 109) provides the best access. It leaves Highway 389 about 7 miles (12 km) west of Fredonia. Traversing 61 pinyon, juniper, and sagebrush-studded miles (100 km) across the Arizona Strip, it is subject to washboarding and dust. RVs, trailers, and low-clearance vehicles are not recommended.

Tuweep rewards adventurers with solitude, seldom trod trails, dark night skies, and spectacular views, but go prepared.



Kolb Brothers photograph

Let Wildlife Be Wild

The North Rim is well known for its wildlife. Deer, turkeys, coyotes, and Kaibab squirrels frequently can be seen in the lush meadows and forests. For your own safety and the well-being of the animals, when viewing wildlife:

Keep your distance.

Discourage animals from approaching you. Scare them away. Yell or stamp your feet.

Never feed them. Natural foods should be abundant this year. These foods are still the best. Once a wild animal is fed human food, it may become addicted. Animals will often ingest wrappers and plastic bags along with the food, eventually leading to their death.

Inform others. If you see other visitors approaching or feeding wildlife, let them know that their actions are a danger to themselves and the animal. Report the offender's license plate or other identifying information to a ranger. It is a crime to feed or even approach wildlife. Offenders can be fined up to \$5,000. [36CFR2.2(A)(2)]

Protect yourself, family, and pets. Deer can be aggressive. Serious bites from squirrels happen all too often. Fleas on squirrels may carry bubonic plague. Enjoy the wildlife from a distance.



Pets

Pets, except signal and guide dogs, are not allowed on trails other than the Bridle Trail that connects the Grand Canyon Lodge with the North Kaibab Trail.

Pets must be on a leash.

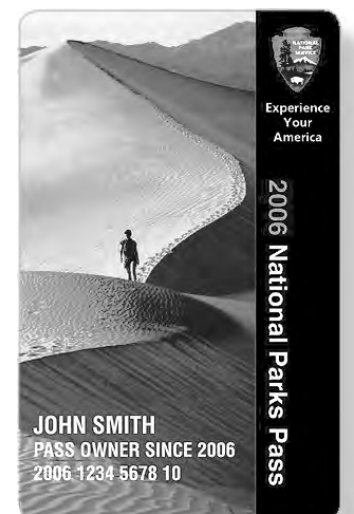


National Parks Pass... Good at All National Parks

The National Park Service proudly offers the National Parks Pass. This pass admits the pass holder and any accompanying passengers in a private vehicle to all national parks for one year.

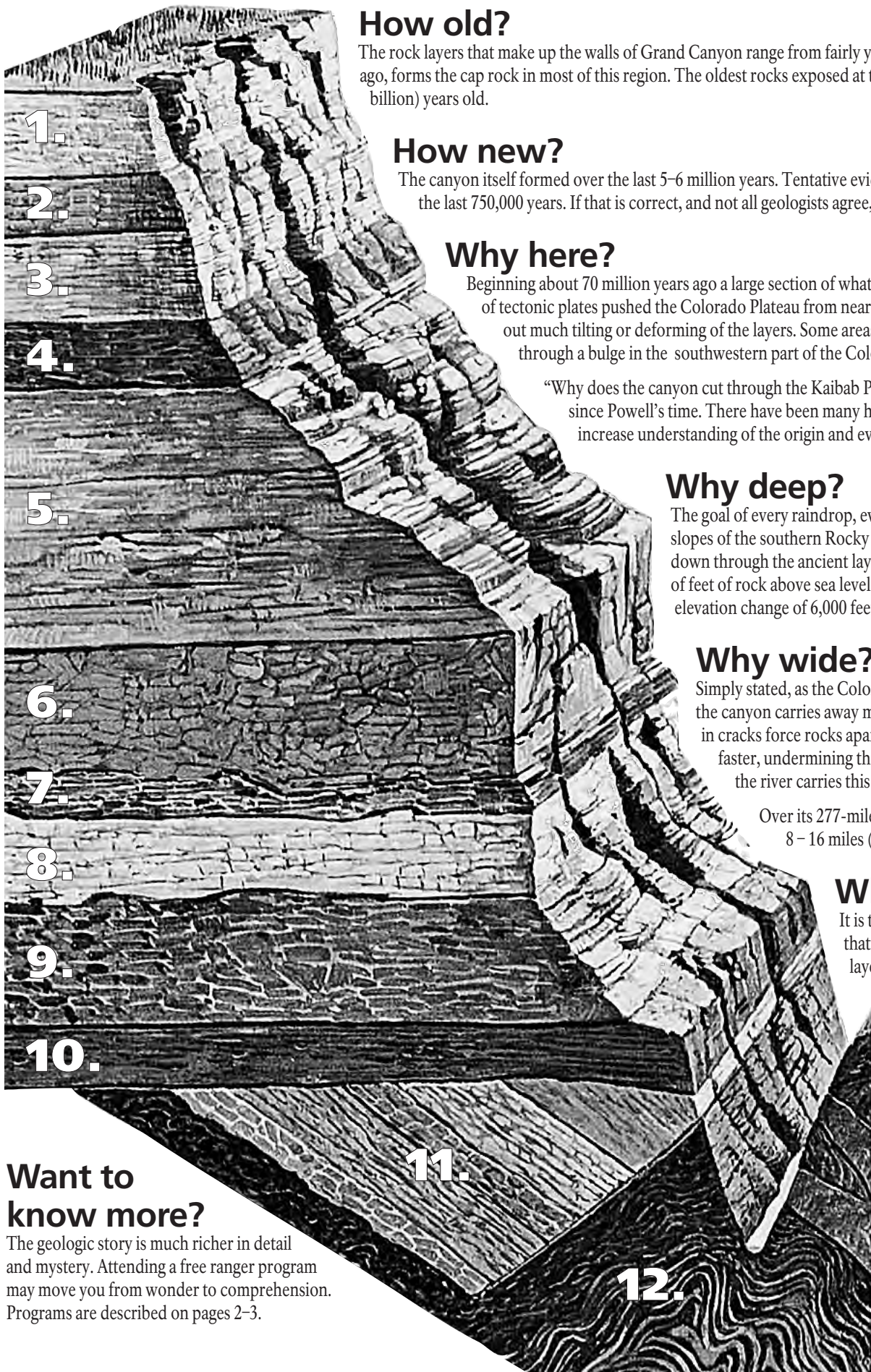
The National Parks Pass can be purchased for \$50.00 at park fee stations, by calling 1-888-GO-PARKS, online at www.nationalparks.org, and through cooperating associations, such as Grand Canyon Association (800) 858-2808, www.grandcanyon.org.

You can apply your park entry fee toward the National Parks Pass.



Park News

Six Questions: A Geology Sampler



How old?

The rock layers that make up the walls of Grand Canyon range from fairly young to fairly old. The Kaibab Formation, deposited approximately 270 million years ago, forms the cap rock in most of this region. The oldest rocks exposed at the bottom of the canyon, gneiss (NICE) and schist, date to about 1,800 million (1.8 billion) years old.

How new?

The canyon itself formed over the last 5–6 million years. Tentative evidence suggests that the lower 2,000 feet (600 m) of the canyon’s depth was carved in the last 750,000 years. If that is correct, and not all geologists agree, almost half the canyon eroded in a geological instant.

Why here?

Beginning about 70 million years ago a large section of what became the southwestern United States began rising. Pressure caused by the collision of tectonic plates pushed the Colorado Plateau from near sea level to more than 10,000 feet (3,000 m) high. Amazingly, this uplift occurred without much tilting or deforming of the layers. Some areas rose even higher. The section of the canyon viewed from the North Rim cuts through a bulge in the southwestern part of the Colorado Plateau called the Kaibab Uplift.

“Why does the canyon cut through the Kaibab Plateau (Uplift), rather than going around it?” is a question that has plagued geologists since Powell’s time. There have been many hypotheses advanced to explain this event. Research conducted today strives to increase understanding of the origin and evolution of Grand Canyon.

Why deep?

The goal of every raindrop, every rock, every grain of sand is to return to the sea. As water drained off the western slopes of the southern Rocky Mountains and across the Colorado Plateau, it carried sand, gravel, and rocks, cutting down through the ancient layers. Without the uplift of the Colorado Plateau, there would not have been thousands of feet of rock above sea level to cut through. From Point Imperial on the North Rim to the Colorado River is an elevation change of 6,000 feet (1,800 m), yet the river is still 2,800 feet (850 m) above sea level.

Why wide?

Simply stated, as the Colorado River cuts down, the walls collapse around it. Water flowing down the sides of the canyon carries away material forming side canyons. Water freezing in cracks in rocks or plant roots growing in cracks force rocks apart into smaller chunks, which cascade down the canyon sides. Softer layers erode faster, undermining the harder layers above them. Without adequate support, the cliffs collapse. Ultimately, the river carries this eroded material to the Gulf of California.

Over its 277-mile (446 km) length, Grand Canyon varies in width. Along the North Rim it is from 8–16 miles (13–26 km) wide, depending on where you choose to measure.

Why Grand?

It is the ensemble of stunning dimensions—the melding of depth, width, and length—that sets Grand Canyon apart. Nowhere else is such a dazzling variety of colorful rock layers, impressive buttes, and shadowed side canyons revealed in such a dramatic chasm. Grand Canyon is the canyon by which all other canyons want to be measured.

Illustration:

- 1. Kaibab Formation 270 million years
- 2. Toroweap Formation 273 million years
- 3. Coconino Sandstone 275 million years
- 4. Hermit Formation 280 million years
- 5. Supai Group 315–285 million years
- 6. Redwall Limestone 340 million years
- 7. Temple Butte Formation 385 million years
- 8. Muav Limestone 505 million years
- 9. Bright Angel Shale 515 million years
- 10. Tapeats Sandstone 525 million years
- 11. Grand Canyon Supergroup 1.25 billion–740 million years
- 12. Vishnu basement rocks 1.84–1.68 billion years

Want to know more?

The geologic story is much richer in detail and mystery. Attending a free ranger program may move you from wonder to comprehension. Programs are described on pages 2–3.

Grand Canyon Lodge: 78 Years of Service



Grand Canyon Lodge on the North Rim of the Grand Canyon is often the first prominent feature that visitors see, even before viewing the canyon. The highway ends at the Lodge. The lodge's sloped roof, huge ponderosa beams and massive limestone facade fit its 8,000-foot (2,400 m) setting, but where is the Grand Canyon?

To experience the full impact of the design of the lodge, take the historic route. Go through the front entrance. Walk across the carpeted lobby and descend the stairwell. Shining through great windows across the "Sun Room" is the much-anticipated first view of the Grand Canyon.

The architect, Gilbert Stanley Underwood, following the wishes of then-Director of the National Park Service, Steven Mather, designed a rustic national park lodge. The Grand Canyon Lodge served as a symbol of the importance of the preservation of this natural wonder, while allowing for luxury and enjoyment. Yet, Underwood had incorporated something extra—a surprise view!

Underwood's 1928 Grand Canyon Lodge, designed for then-concessionaire the Union Pacific Railroad, is not today's lodge. Underwood's design included a massive Spanish style exterior with a high front topped by an observation tower. The original burned down in 1932 and a "new" 1937 lodge sits on its footprint. The fire that destroyed the 1928 lodge spread from below the kitchen to engulf the structure within minutes. On the top floor over the auditorium slept the only inhabitants—the lodge manager, his wife, and the maids. All exited safely to stand watching helplessly in the early morning hours of September 1, 1932. The employees must have wondered if their jobs were burning up that night, but the nearby cabins, except two, escaped the blaze.

The Utah Parks Company, Union Pacific's subsidiary, hastily erected a cafeteria and recreation hall. The next summer the buses brought more visitors, but Underwood's secret surprise of having your first view of the Grand Canyon inside the lodge, was lost until the summer of 1937. That June, the

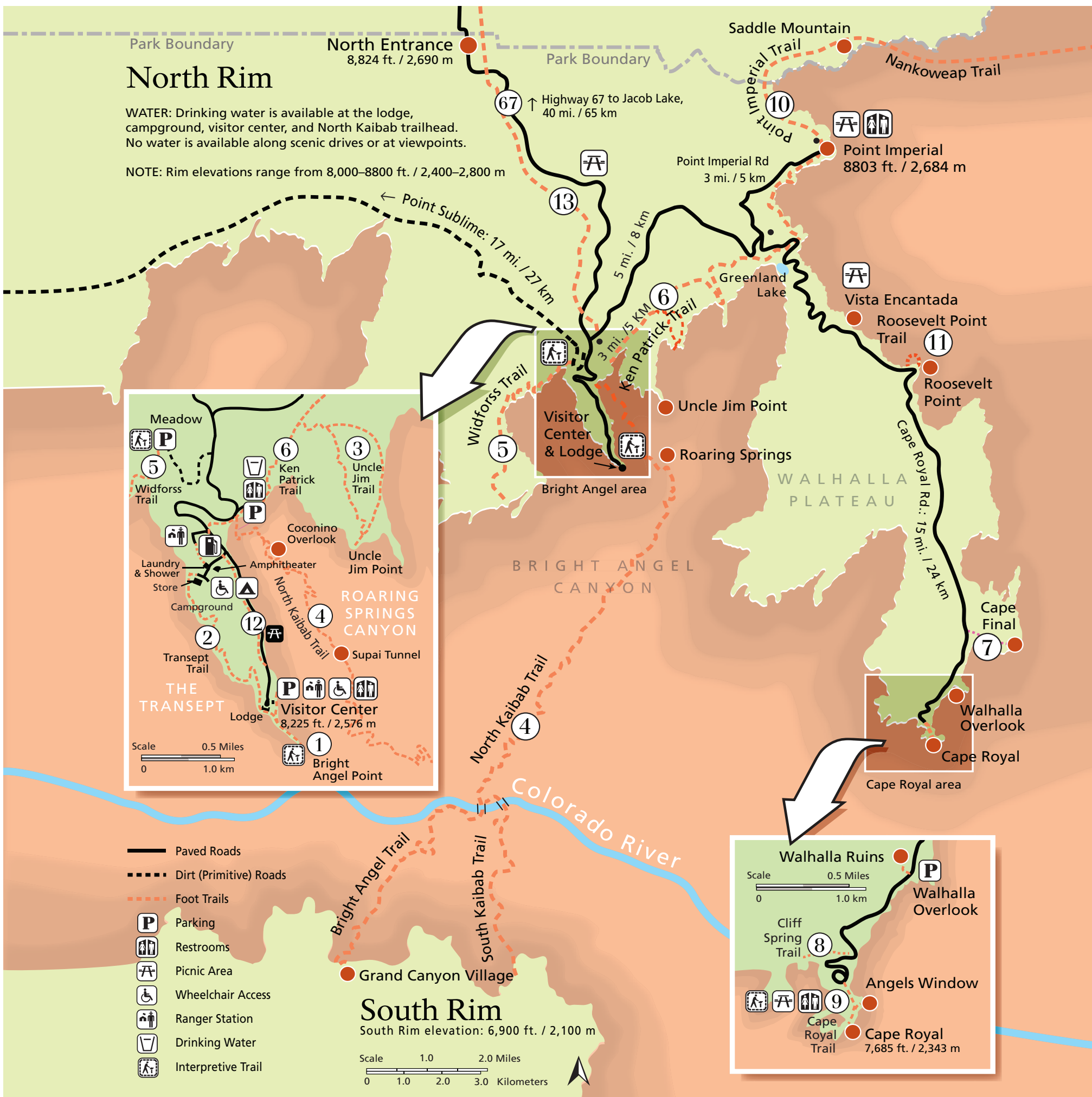
Grand Canyon Lodge reopened. Utilizing the same floor plan, the builders had erected a more sensible structure with sloped roofs, better able to shed the heavy snows. They also preserved Underwood's surprise view.

Today's visitors will not have the experience of pulling up to the lodge in a White Motor Company bus and having the college-age employees sing them through the entrance. These same employees would later entertain with a talent show after serving dinner, and end the evening with a dance complete with a college boy orchestra.

The lodge still exhibits Underwood's genius. Another genius, the geologist Clarence E. Dutton, came to the North Rim in 1880 and described his experience in his masterpiece, *A Tertiary History of the Grand Canyon District*. "The earth suddenly sinks at our feet to illimitable depths. In an instant, in the twinkling of an eye, the awful scene is before us." Underwood must have read his book, or perhaps inspiration does strike twice.



North Rim Map



North Rim Trails

Trail Guide

Always check on the status of trails before traveling to the trailhead. The opening of the North Kaibab Trail may be delayed due to severe winter damage.

Day hiking in Grand Canyon is one way to experience some of the canyon's rich natural beauty and immense size. No permits or fees are required for day hikes. A good rule to follow is to decide how many hours you wish to hike. When 1/3 of the time has passed, turn around and begin to hike back. Assuming that you are physically fit and have adequate food and water (at least 3 quarts / liters per person), the following day hikes are considered reasonable for most people during the summer months. **The numbers below correlate with the map on the opposite page.**

1. Bright Angel Point Trail

0.5 mi. / 0.8 km round-trip; 30 minutes approximate round-trip hiking time. A short walk on a paved trail to a spectacular view of the canyon. The trail begins at the log shelter in the parking area by the visitor center or at the corner of the back porch behind the lodge. Self-guiding nature trail pamphlets are available from a box along the trail.

2. Transept Trail

3.0 mi. / 4.8 km round-trip; 1.5 hours approximate round-trip hiking time. Follows the canyon rim from Grand Canyon Lodge to the North Rim Campground.

3. Uncle Jim Trail

5.0 mi. / 8.0 km round-trip; 3 hours approximate round-trip hiking time. Winds through the forest to a point overlooking the canyon and the North Kaibab Trail switchbacks. Begins at the North Kaibab Trail parking lot. This trail is also used by mules.

4. North Kaibab Trail

Distance and hiking times vary. This is the only maintained trail into the canyon from the North Rim. Even a short hike to Coconino Overlook (1.5 miles / 2.4 km round-trip) or Supai Tunnel (4 miles / 6.5 km round-trip) can give you an appreciation for the canyon's rich natural beauty and immense size. A hike to Roaring Springs and back is extremely strenuous and takes a full day (7-8 hours)—begin your hike before 7 a.m. Roaring Springs lies 3,050 feet / 930 m below the canyon rim and is 9.4 miles / 15 km round-trip. A day hike beyond Roaring Springs is not recommended. Many years of experience have shown that hikers who proceed beyond this point during the hottest parts of the day have a much greater probability of suffering from heat-related illness, injury, or death. This trail is also used by mules. **NOTE: Round trip to the Colorado River is 28 miles / 45 km and trail descends almost 6,000 ft. / 1,800 m. Under no circumstances should you attempt to hike from the rim to the river and back in one day! Do not hike during the hottest part of the day.**

5. Widforss Trail

10 mi. / 16 km round-trip; 6 hours approximate round-trip hiking time. Blends forest and canyon scenery. Even a short walk can be very satisfying. Take the dirt road 1/4 mile/0.4 km south of Cape Royal Road for 1 mile / 1.6 km to the Widforss Trail parking area. Self-guiding trail brochure available at trailhead.

6. Ken Patrick Trail

10 mi. / 16 km one-way; 6 hours approximate one-way hiking time. Winds through the forest and along the rim from Point Imperial to the North Kaibab Trail parking area.

7. Cape Final Trail

4.0 mi. / 6.4 km round-trip; 2 hours approximate round-trip hiking time. A 2-mile walk from dirt parking area to Cape Final. This trail offers a view of the canyon.

8. Cliff Springs Trail

1.0 mi. / 1.6 km round-trip; 1 hour approximate round-trip hiking time. Meanders down a forested ravine and ends where a chest-high boulder rests under a large overhang. The spring is on the cliff side of the boulder. Please do not drink the water as it may be contaminated. Trail begins directly across the road from a small pullout on a curve 0.3 miles / 0.5 km down the road from Cape Royal.

9. Cape Royal Trail

0.6 mi. / 1.0 km round-trip; 30 minutes approximate round-trip hiking time. An easy walk on a flat, paved trail providing views of the canyon, Angels Window, and the Colorado River. Markers along the trail interpret the area's natural history. Trail begins at the southeast side of the Cape Royal parking area.

10. Point Imperial Trail

4.0 mi. / 6.4 km round-trip; 2 hours approximate round-trip hiking time. This easy trail passes through areas burned by the 2000 Outlet Fire and ends at the north park boundary. From there connections are possible to the Nankoweap Trail and U.S. Forest Service roads.

11. Roosevelt Point Trail

0.2 mi. / 0.3 km round-trip; 20 minutes approximate round-trip hiking time. This trail is a short, secluded woodland loop with spectacular views. Offers benches for relaxed enjoyment of the canyon.

12. Bridle Trail (watch for construction on this trail)

This trail follows the road as it connects the Grand Canyon Lodge with the North Kaibab Trailhead, a distance of 1.2 miles / 2 km one-way. Pets on leash and bicycles are permitted on this hard-packed trail.

13. Arizona Trail

The Arizona Trail is an ambitious project that traverses the length of Arizona from the Utah border to Mexico. A section of this trail enters the park near the North Entrance and roughly parallels the highway until it connects with the North Kaibab Trail, a distance of approximately 10 miles / 16 km.



Day and Overnight Hiking

Before You Go, Remember...

Plan Ahead. As a day hiker no permits are required. You are entirely on your own. Your descent into the canyon, however brief, marks your entry into a world in which preparation, self-reliance, and common sense are crucial.

Temperatures Can Soar. There is a 20–30°F (11–16°C) difference in temperature between the cool, forested rim and the inner canyon. Canyon temperatures can soar to more than 110°F (43°C) in the shade, and you will not be hiking in the shade.

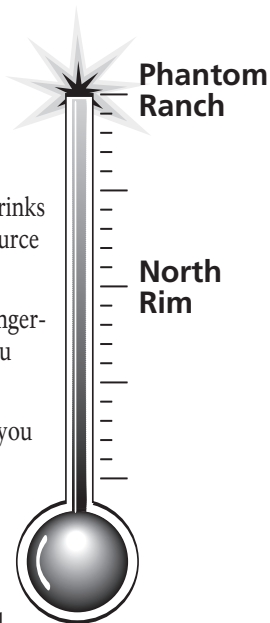
Double Your Calories, Double Your Fun. Salty snacks and water or sports drinks should be consumed on any hike lasting longer than 30 minutes. Food is your body's primary source of fuel and salts (electrolytes) while hiking in the canyon.

If you do not balance your food intake with fluid consumption, you run the risk of becoming dangerously debilitated and severely ill. For every hour to one-and-a-half hour hiking in the canyon, you should drink 1/2 to 1 quart (liter) of water or sports drinks.

Your best defense against illness and exhaustion is to eat a healthy breakfast, a snack every time you take a drink, and a rewarding full dinner at the end of the day. This is not a time to diet.

Watch Your Time. Plan on taking twice as long to hike up as it took to hike down. Allow 1/3 of your time to descend and 2/3 of your time to ascend.

Avoid the Danger Zone! The Danger Zone results from a combination of distance traveled, elevation change, temperature, and direct sunlight that can overwhelm your body's ability to keep cool, fueled, and hydrated. The Danger Zone generally starts to develop between 1 1/2 and 3 miles (3 to 5 km) down inner canyon trails. It's HOT down there!



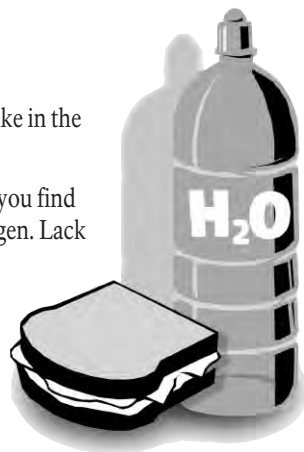
Mules and Hikers

Several recent encounters between hikers and mules resulted in injuries to packers and the deaths of some mules. To ensure safety for yourself, other trail users, and mule riders, when encountering mules on the trails:

- Step off the trail on the uphill side away from the edge.
- Follow the directions of the wrangler. Remain completely quiet and stand perfectly still.
- Do not return to the trail until the last mule is 50 feet (15 m) past your position.

Hiking Tips

1. Be cool. Hike during the cooler early morning and late afternoon hours. If you hike in the sun, try to keep your shirt and hat wet to stay cool.
2. Go slowly. If you can carry on a conversation, you are hiking at the right pace. If you find yourself out of breath, your legs and digestive system are not getting enough oxygen. Lack of oxygen may cause fatigue, heavy legs, and exhaustion.
3. Rest often. Find shade, sit down, prop your legs up, and take a 10-minute break at least once every hour.
4. Eat and drink frequently. Balance your food and water intake. Eat a salty snack every time you take a drink.



The Canyon Belongs to Everyone

During your visit we ask that you respect the canyon and the rights of others by doing the following:

- Carry out all your trash.
- Leave all fossils, rocks, plants, and animals as you find them, so those who come after you may also enjoy them.
- Refrain from throwing or rolling rocks. They may injure people below you.
- Enjoy the natural quiet. Do not yell while on the trail.

Overnight Hiking

A hike into the canyon will test your physical and mental endurance. Know and respect your limitations. Rangers will be glad to help you plan a hike within your capabilities. All overnight hikers, except those staying in the lodging at Phantom Ranch, need to obtain a backcountry permit.

Hiking Permits

Backcountry use permits and fees are required for overnight hiking. Day hikes do not require a permit or fee.

Backcountry Fees

- \$10.00 Backcountry Permit Fee
- \$5.00 User Impact Fee per person per night (In addition to the Backcountry Permit Fee).

Overnight permit requests should be sent well in advance to: Backcountry Information Center, P.O. Box 129, Grand Canyon, Arizona 86023.

Hikers arriving without permits should contact the North Rim Backcountry Office located 11.5 / 18.5 km miles south of the North Entrance (just north of the camp-ground entrance). Office hours are 8:00 a.m.–noon and 1:00–5:00 p.m. daily.

Overnight Backpackers

Avoid hiking in the middle of the day. All overnight backpacking parties should begin their trip, daily changes of camp, and return hike to the rim before 7 a.m. or after 4 p.m.

All hikers should be aware that efforts to assist them may be limited during the summer months due to limited staff, the number of rescue calls, employee safety requirements, and limited helicopter flying capability during periods of extreme heat.

- Be prepared. Hike intelligently.
- You are responsible for your own safety

Health Hazards

Moderation is the key to having an enjoyable hike. Hike within your ability, maintain proper body temperature, balance your food and water intake, and rest often. Emergency situations include:

Heat exhaustion is the result of dehydration due to intense sweating. Hikers can lose one to two quarts (liters) of water per hour. Canyon rangers treat as many as twenty cases of heat exhaustion a day in summer.

Symptoms: pale face, nausea, cool and moist skin, headache, and cramps

Treatment: drink water, eat high-energy foods, rest in the shade, cool the body.

Heat stroke is a life-threatening emergency where the body's heat regulating mechanisms become overwhelmed by a combination of internal heat production and environmental demands. Every year two to three Grand Canyon hikers experience heat stroke.

Symptoms: flushed face, dry skin, weak and rapid pulse, high body temperature, poor judgment or inability to cope, unconsciousness. Victim is in danger!

Treatment: find shade, cool victim with water, send for help!

Hyponatremia is an illness that mimics the early symptoms of heat exhaustion. It is the result of low sodium in the blood caused by drinking too much water, not eating enough salty foods, and losing salt through sweating.

Symptoms: nausea, vomiting, altered mental states, and frequent urination

Treatment: have the victim rest and eat salty foods. If mental alertness decreases, seek immediate help!

Hypothermia is a life-threatening emergency where the body cannot keep itself warm, due to exhaustion and exposure to cold, wet, windy weather.

Symptoms: uncontrolled shivering, poor muscle control, and a careless attitude

Treatment: put on dry clothing, drink warm liquids, warm victim by body contact with another person, and protect from wind, rain, and cold.

Brighty of the Grand Canyon



In 1953 Marguerite Henry wrote *Brighty of the Grand Canyon*. Ever since, children and adults have been fascinated by the small burro who played a role in Grand Canyon history. Who was Brighty? And how much of the tale is true?

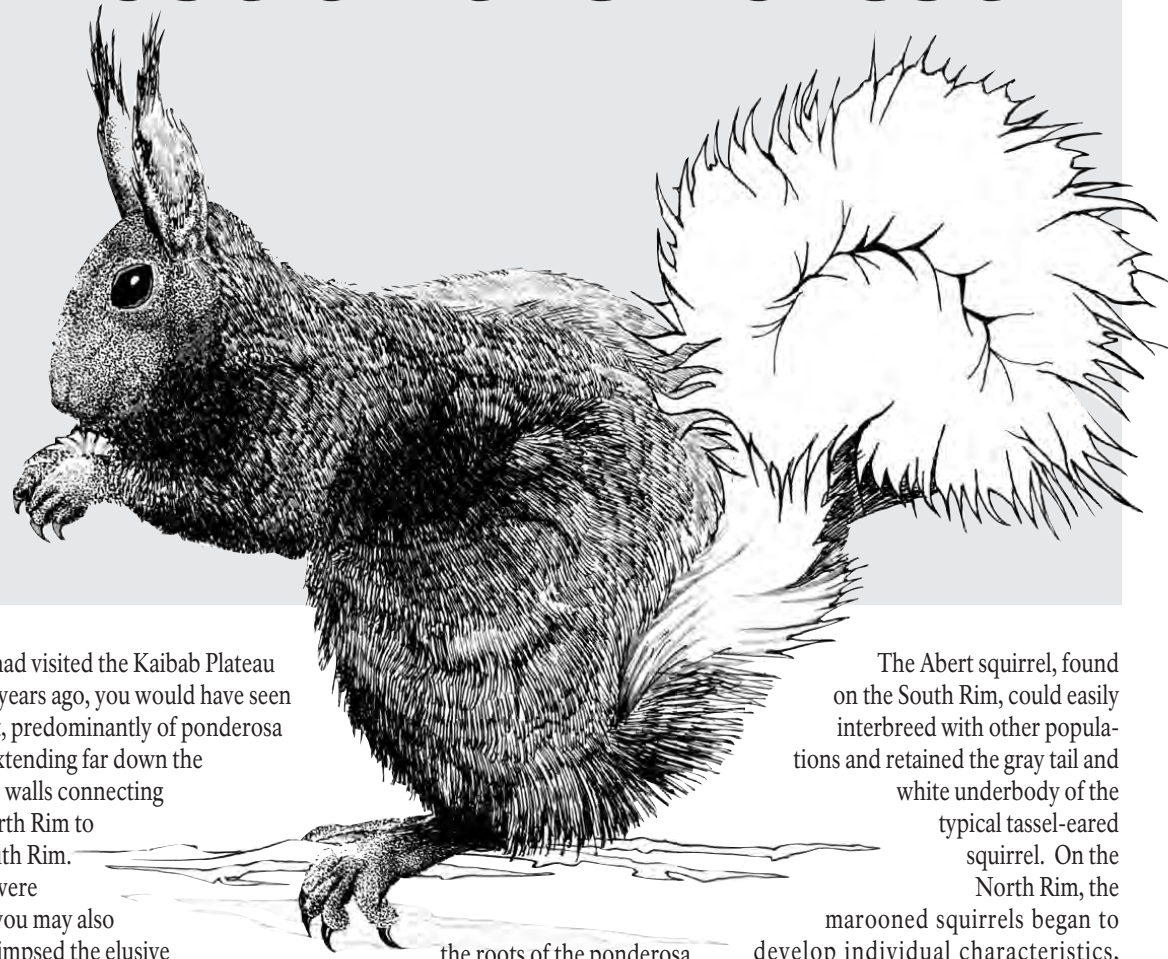
There was a real Brighty. He lived at Grand Canyon from around 1892 until 1922. He was given the name "Bright Angel" after the creek that flowed into the canyon from his home on the North Rim, but everyone called him Brighty. He spent his summers carrying water from a spring to early tourist accommodations on the North Rim. He was tolerant of children, who would ride on his back for hours. Most of the events and people in Marguerite Henry's book were based on fact: Brighty was the first to cross the new bridge at the bottom of the canyon, and he did meet Teddy Roosevelt.

In spite of his friendliness toward people and his willingness to act as a beast of burden, he was essentially a wild creature who roamed the canyon at will. It is this spirit of independence, more than anything, that has captured the hearts of readers for years. Today a life-size bronze statue of Brighty (the work of sculptor Peter Jepson) sits in Grand Canyon Lodge on the North Rim, where he is admired and remembered by children and adults alike.

Legend has it that a rub on the nose brings good luck.

Above: Brighty with the McKee family at the Wylie Way Camp near Bright Angel Point in 1919. GRCA5427

The Silver Ghost of the Forest



If you had visited the Kaibab Plateau 10,000 years ago, you would have seen a forest, predominantly of ponderosa pine, extending far down the canyon walls connecting the North Rim to the South Rim.

If you were lucky, you may also have glimpsed the elusive tassel-eared squirrel.

These squirrels are named for the tufts of fur that grow on each ear tip, protecting the ears from the cold. The tufts may extend 1–2 inches (2.5–5 cm) above the ears in the winter. In the summer they may not even be noticeable. The ear tufts, like a young man's beard, grow longer with age.

Tassel-eared squirrels are intimately tied to the ponderosa pine. The seeds within the pine cones are a primary food for these animals. As you walk through a ponderosa grove, look for a pile of pine cone scales and the cores of the cones looking like an ear of corn after a Thanksgiving meal. This midden is the squirrel's dining table. When cones are not ripe, the squirrels will gnaw the bark off twigs to get at the tender cambium layer below.

Another favorite food is a mushroom or truffle that grows underground on

the roots of the ponderosa pine. Some of the spores within this truffle pass through the squirrel's digestive system unharmed and are deposited on the ground in the feces. The spores sprout into a mold that attaches to the roots of the ponderosa pine where it is thought to aid in the absorption of nutrients from the soil. Squirrel-fungus-pine tree—all dependent on each other.

Thousands of years ago the climate was cooler and wetter and the squirrels could travel easily between the North and South rims. The trees allowed them to make the journey without going hungry. As the climate grew warmer and drier, the forests of ponderosa pines retreated to the rims, closing the door between the North and South Rims for these animals. The Grand Canyon became a barrier. Lowlands surrounding the Kaibab Plateau created a forested island. The populations were isolated.

The Abert squirrel, found on the South Rim, could easily interbreed with other populations and retained the gray tail and white underbody of the typical tassel-eared squirrel. On the North Rim, the

marooned squirrels began to develop individual characteristics, perhaps as an adaptation to their colder environment. The Kaibab squirrel sports a dark underbelly and a snow-white tail that may provide camouflage during the snowier Kaibab Plateau winters.

The Kaibab squirrel is an icon of the Kaibab Plateau, often sought for photographs. Venture out in the early morning and roam the forests. Look on the ground; look above into the treetops. Perhaps you will be rewarded with a glimpse of this elusive animal.

Illustration drawn by Ranger Mark McCutcheon

Park Science

Fire: A Management Tool



Fire is an integral part of the park's forested ecosystems, which are dynamic and must change in order to thrive. Plants and animals here have evolved with fire for thousands of years and depend upon fire to create the conditions they need to flourish. Fire management demands a careful balance between suppressing unwanted wildland fires and allowing the positive attributes of fire under favorable conditions. Each new fire is carefully evaluated to determine an appropriate response.

Many factors—weather, topography and vegetation types—influence fire behavior and the effects that fires have on park resources. In prolonged hot, dry and windy conditions, wildland fires pose a threat to park resources and can cause significant damage. Aggressive suppression actions are taken on such fires.

Fire is used as a tool for ecosystem restoration when conditions are right. Wildland fire use fires—lightning-caused fires that burn within a defined, undeveloped area—are monitored and evaluated on a regular basis. Suppression actions are taken if fire behavior contradicts resource goals. Prescribed fires are planned ignitions, implemented under scientifically determined conditions, with specific objectives in mind, such as to protect devel-

oped areas. Both prescribed fire and wildland fire serve to enhance resource values.

During the last few years, important fuel reduction work was completed in the North Rim developed area. This was designed to improve defensible space and reduce the potential impacts of wildland fire near structures, campgrounds, and other values at risk. Defensible space is the area between a structure and the surrounding forest where vegetation has been modified to reduce a fire's threat. Properly modified and maintained vegetation can slow a fire, shorten flame lengths, reduce the amount of generated heat, and increase the odds of saving a structure.

The National Park Service has a mandate to preserve resources such as plants and animals, along with the natural processes that sustain them—including fire. Fire management policies have evolved with our understanding of fire's vital role in nature. Fire is a powerful natural force. Its destructive potential is evident, but fire's positive attributes must also be recognized. As a land manager, how would you find a balance between suppressing destructive wildland fires and allowing the natural process of fire to continue?

On the Wings of a Condor



Take a close look at that face. We almost lost it. By the 1980s there were fewer than two dozen California condors left in the world. Researchers trapped the remaining condors and began a captive breeding program to ensure the continuation of the species. The condors cooperated and by the late 1990s enough young condors existed to begin releasing them back to the wild. But where?

Cooperators in the reintroduction program selected the Vermilion Cliffs north of Grand Canyon National Park as one of two release sites. The other was in central California. The undeveloped lands of northern Arizona offered sufficient food and plentiful nesting sites. Fossil evidence shows that condors have nested in the Grand Canyon area for approximately 50,000 years.

California condors have adapted well to this area. Currently about 60 condors are soaring over Arizona. Many of them frequent Grand Canyon, especially during the summer. The experimental release program has reached a critical time in its development. To call the program a success, the birds must not only survive, but also reproduce.

And that is just what happened a few years ago! After a couple of years of unsuccessful nests, the summer of 2003 witnessed the first condor hatched and fledged in Arizona in more than a century. Unfortunately, this young condor died in the canyon this last spring. The cause of death appears to be starvation.

Two additional condors fledged in both 2004 and 2005.

This year observers have documented several active nests in the Grand Canyon area. For some unknown reason the birds nested later than usual. Ask a ranger for a progress report on the success of this year's nests.

California condors, being curious, are attracted to human activity. If you see a condor, do not approach it or offer it food. Try to read the number on the wing band and report it to a ranger. As you enjoy your next Grand Canyon viewpoint, look for these massive scavengers soaring on their nine-foot (3-m) wings over the canyon.



The Value of Volunteering



Why are you wearing a green shirt? Do you work here? How did you get this job? We are volunteers. My colleagues range in age from 18–75 and work in natural resources, interpretation, maintenance, even the park's library. Last year 1,222 volunteers contributed 49,033 hours to Grand Canyon National Park. We come from all walks of life and have very different goals. One of us has spent eighteen years working as a resource protection volunteer at Phantom Ranch, while another works in the warehouse. A cadre of condor watchers spent more than 1,400 hours observing a nest from the South Rim. The one characteristic we all share is our love of Grand Canyon.

Let me share my story. I am in my fifth season with the Division of Interpretation at Grand Canyon, my sixth national park. Seven years ago I retired as a professor of Physical Education at Pacific Lutheran University. Because I cannot sit still, nor live a life that is not centered in giving, I looked for a creative outlet. National park areas are national treasures that I believe are underappreciated. I made a commitment to help save these special places.

One of the challenges of coming to a new area is learning enough to help visitors appreciate and understand the park and its mission. Volunteers receive training, but most of the in-depth learning comes from reading and working with rangers who share their insights and knowledge.

It is a joy for me to get up each morning and drive or walk the rim to work. The serenity and ever-changing beauty give me great satisfaction. I love to share the stories of this magnificent place. The interest of others gives me energy to keep going. In what other job or volunteer position could I combine all the things I enjoy?

I have talked with hundreds of visitors and have written new exhibit text for the displays in Tusayan Museum. I have hiked the canyon trails while in uniform to provide a presence, some extra water, or words of encouragement to hikers. My challenge each day is to find ways to make visitors' experiences better.

The next time you see a volunteer in a green shirt with a National Park Service volunteer patch on the sleeve, know that we want to answer your questions or tell you what we are doing here. We do not take the place of park employees, but supplement and assist them in any way we can. We are prepared, well informed, and love our jobs. Should you hear the call of the canyon and are interested in volunteer opportunities here or at other national park sites visit www.nps.gov/volunteer for more information or write:

Volunteer in Parks
National Park Service
P.O. Box 129
Grand Canyon, AZ 86023

The National Park Service would like to thank Sara Officer, the author of this article, and all the volunteers who have contributed their time and talents to this and other NPS areas.



An Unwelcome Visitor



During your travels on the North Rim, you may encounter some wildlife that you were not expecting to see in northern Arizona—bison or, as they are better known, buffalo. Bison have moved into the park from a game ranch in House Rock Valley below the Kaibab Plateau.

The National Park Service is currently conducting research to determine if bison are native to the Kaibab Plateau area. Historical records located to date indicate that even when there were uncountable millions of bison on the plains, none were found in Arizona. By the turn of the last century bison had been nearly exterminated throughout North America. Only a few herds existed, mostly being raised in ranching situations.

Two of the more colorful North Rim characters—Charles Jesse “Buffalo” Jones and Uncle Jim Owens—are responsible for bison in Arizona. In 1906 they drove a herd of fifty-six bison from the railhead at Lund, Utah, to House Rock Valley. A year later thirty additional bison arrived. Jones and Owens experimented with raising “cattalo,” a cross between bison and cattle. The cattalo business did not work out financially, but Uncle Jim became attached to his bison and cattalo. After maintaining the herd for more than twenty years, he sold them to the state of Arizona in the late 1920s.

The bison seemed to be content to stay in House Rock Valley, for the most part. In the late 1980s, however, a few were occasionally seen on the Kaibab Plateau. In the last few years more have been encountered, perhaps encouraged by low-snowfall winters and recent forest fires. Changes in herd management strategies by the state may be an additional factor.

Bison impact native plants. The trampling of bison hooves around scarce springs and other water sources destroys the vegetation and pollutes the water. The National Park Service is currently addressing the issue of exotic versus native species and the proper management of bison on the Kaibab Plateau. This last winter researchers equipped four bison with radio transmitters to track their movements.

As with any wildlife, avoid approaching bison or letting them approach you. These are wild animals and can be dangerous. Bison have seriously injured or killed visitors in parks such as Yellowstone, where they are a native species.

Should you encounter bison, please fill out an observation form at the visitor center with the location, date and time. Your observations are important to the park, as they will help us locate bison and document their effects on the ecosystem.



Bison or Buffalo?

To scientists involved in classifying animals, buffalo are found only in the Old World, Asia and Africa. The water buffalo and Cape buffalo are good examples. Bison are the bovines that evolved in North America. However, the names are used interchangeably with buffalo probably being the most common.

Many times ranchers have crossed bison with cattle in an attempt to produce heartier stock and meat with less fat content. Such crosses are referred to as cattalo or beefalo. Genetic testing on the House Rock Valley bison confirms that they still carry cattle genes.

No matter what you call them, remember that these are wild animals and can do bodily harm. Do not approach them or let any wildlife approach you!

Above left: Cattalo hybrid in the 1920s. This color pattern is not seen today.

Kaibab National Forest

Welcome to the North Kaibab Ranger District



Grand Canyon National Park is bounded on the north and south by the Kaibab National Forest. The North Kaibab Ranger District was part of the lands included in the Grand Canyon Forest Reserve, set aside in 1893. President Theodore Roosevelt created the Grand Canyon Game Preserve in 1906. The game preserve, which included 612,736 acres / 248,071 ha of the Kaibab National Forest, was “set aside for the protection of game animals and birds,” and is “to be recognized as a breeding place therefore.” In 1908 the Forest Reserve north of the Grand Canyon was renamed the Kaibab National Forest. Grand Canyon National Park was created from Forest Service lands surrounding the canyon in 1919. Headquarters for the North Kaibab Ranger District is in Fredonia, Arizona, while the Kaibab National Forest supervisor’s office is in Williams, Arizona.

Much of the Kaibab Plateau, an “island” surrounded by lower elevations, is protected within the Kaibab National Forest and Grand Canyon National Park. “Kaibab” is a Paiute Indian word meaning “mountain lying down.”

Visitor Center

A visit to the North Kaibab Ranger District should include a stop at the North Kaibab Plateau Visitor Center in Jacob Lake, Arizona. The visitor center is open 9:00 a.m.–5:00 p.m. daily from mid-May to mid-September, with reduced hours later into the season. Displays highlight the uniqueness of the Kaibab Plateau and information about the Kaibab National Forest is available. Books about the region are available for purchase.

Scenic Vistas

The North Kaibab Ranger District offers a variety of spectacular views of Grand Canyon, Kanab Creek Wilderness, and Vermilion Cliffs. Some of these points are easy drives in a sedan, while others are recommended only for high-clearance vehicles. Remember, get a map before heading out on the more remote routes.

Arizona Highway 67 from Jacob Lake to the North Rim of the Grand Canyon has been described as “the most pleasant 44 miles in America.” It flows through beautiful alpine scenery including a vast forest of pine, fir, and aspen interspersed with lush meadows. Highway 67 has been designated a National Forest Scenic Byway and a State Scenic Parkway. Due to heavy snow the road is normally closed from November through mid-May.

Camping

There are three developed campgrounds for picnicking and camping—De Motte, Jacob Lake, and small, primitive Indian Hollow. De Motte, located 7 miles / 11.3 km north of the park boundary should open for the season in July. Jacob Lake frequently has sites available. Campsites are available on a first-come, first-served basis with the exception of the Jacob Lake Group Camping area where reservations can be made.

You may camp away from campgrounds on national forest land. Such camping is referred to as dispersed camping. When you are away from the developed facilities remember:

- **There is no garbage service.** Pack out what you take in.

- **Bring your own water.** There are few reliable water sources on the Kaibab Plateau.
- **Be fire safe.** Carry a shovel and bucket. Check with Forest Service offices for fire restrictions.
- **Bury all human waste** at least 4–6 inches (10–15cm) deep and a minimum of 100 feet (30 m) from water sources and drainage bottoms.
- **Practice backcountry ethics** and eliminate all signs of your camp.
- **Camp at least 1/4 mile (0.4 km) from water sources** to allow access for wildlife and livestock.

Trails

Trails on the North Kaibab Ranger District offer both challenges and rewards for the hiker, bicycle enthusiast, equestrian, or cross-country skier. Challenges come from the steep, rugged terrain, the primitive trails, and the potential lack of water. Rewards include solitude among the most scenic features found in all the canyon lands, the discovery of unique rock formations, and breathtaking views of distant vistas.

Winter Sports

Cross-country skiing is a good way to enjoy northern Arizona’s winters. The many forest roads become great ski trails. Although there are no designated snowshoeing areas, the snow-covered roads are excellent for this activity also. Many miles of forest roads and connecting meadows provide excellent snowmobiling opportunities. The area east of Highway 67 and south of Highway 89A is closed to motorized winter use and offers added solitude.

Wilderness

Wilderness is part of America’s heritage. The North Kaibab Ranger District offers more than 108,000 acres (44,000 ha) that remain wild and free in two wilderness areas—Kanab Creek on the west side of the plateau and Saddle Mountain to the east.

Elevations in the Kanab Creek Wilderness range from 2,000 feet (600 m) at Kanab Creek to 6,000 feet (1,800 m) at the rim. This wilderness contains Kanab Creek, a major tributary of the Colorado River, and a network of vertical-walled gorges.

Saddle Mountain Wilderness varies in elevation from 6,000 feet (1,800 m) on the Marble Canyon Rim to 8,000 feet (2,400 m) on Saddle Mountain. Gentle slopes on top of the plateau change to sudden drop-offs at the rim. Narrow drainages cut their way into the plateau’s flanks.

Heritage Resources

Evidence of prehistoric cultures can be found throughout Kaibab National Forest. Historic and prehistoric sites and artifacts on public lands are protected by federal law. Please leave these sites undisturbed. Vandalism should be reported to Forest Service or other law enforcement officials.

Jacob Lake Ranger Station, built in 1910, is associated with the beginning of the U.S. Forest Service and stands today on its original site.

Wildlife Viewing

The diversity of wildlife found on the Kaibab Plateau provides enjoyment for the photographer, bird watcher, nature lover,

hiker and camper. The best time for viewing and photographing wildlife is early morning or early evening. Meadows are especially attractive because of their increased food supply.

Wild Merriam’s turkeys are found throughout the forest and are frequently seen from roadways. Mule deer are also common. Watch for the flash of the Kaibab squirrel as it runs from tree to tree.

For further information on the North Kaibab Ranger District contact:

North Kaibab Plateau Visitor Center and Grand Canyon Association Bookstore
Jacob Lake
Fredonia, AZ 86022
(928) 643-7298

North Kaibab Ranger District
P.O. Box 248
Fredonia, AZ 86022
(928) 643-7395

Above left: Racetrack Knoll from Ranger Trail. USFS photo by Tom Hooker

Center: White columbines. USFS photo by M. Siders

Right: Top of the Nakoweap Trail, looking east toward Marble Canyon, Saddle Mountain Wilderness. USFS photo by Susan Hittson

Lodging, Services, and Information

Food

Grand Canyon Lodge Dining Room

With a view of the canyon, the dining room is open daily for breakfast 6:30 a.m.–10:00 a.m., lunch 11:30 a.m.–2:30 p.m., and dinner 4:45 p.m.–9:45 p.m. (reservations are required for dinner). For information call (928) 638-2611.

Deli in the Pines

Located in the Grand Canyon Lodge complex, the delicatessen is open daily 7:00 a.m.–9:00 p.m. through Sept. 30 and Oct. 1–14 7:00 a.m.–8:00 p.m.

Roughrider Saloon

Located in the Grand Canyon Lodge complex, the saloon is open daily 11:30 a.m.–11:00 p.m. and 5:30 a.m.–10:30 a.m. for gourmet coffee and pastries.

Groceries/Camping Supplies

Located adjacent to the North Rim Campground, the General Store is open daily 7:00 a.m.–8:00 p.m. through Sept. 30 and Oct. 1–14 7:00 a.m.–7:00 p.m.

Lodging

In the Park

Grand Canyon Lodge

Located on the North Rim. Make reservations through Xanterra by calling (888) 297-2757. Lodging is booked well in advance. Make reservations as far ahead as possible. Check at the lodge for last-minute availability.

Outside the Park

Kaibab Lodge

Located 18 miles/30 km north of the North Rim. Phone (928) 638-2389. Containing a restaurant and store, the lodge is open May 15–Nov. 2. Some services may remain open at the Kaibab Lodge after other facilities in the park have closed.

Jacob Lake Inn

Located 45 miles/75 km north of the North Rim, the Jacob Lake Inn is open daily 6:30 a.m.–10:00 p.m. Phone (928) 643-7232. Contains a restaurant, store and gas station (pay at pump 24 hours a day). Propane is available.

Camping

Camping is permitted only in designated campsites while in Grand Canyon National Park. Violators are subject to citation and/or fine.

In the Park

North Rim Campground

Operated by the National Park Service. Campsites are \$18. No hook-ups or dump station available. Stays are limited to 7 days per season. Reservations through Spherix at 1-800-365-2267. Outside the U.S. dial (301) 722-1257. On the internet at www.reservations.nps.gov

Check at campground for last-minute availability. Campground may remain open past October 15, weather permitting.

Outside the Park

De Motte Campground

Operated during the summer only by the U.S. Forest Service. 16 miles/28 km north of the North Rim. No hook-ups or reservations. Campground is scheduled to open in July 2006.

Jacob Lake Campground

Operated during the summer only by the U.S. Forest Service. 45 miles/75 km north of the North Rim. No hookups or reservations. \$14 per vehicle per night. Free evening programs.

Dispersed Camping

Permitted in the national forest outside the park, however there may be restrictions. Inquire at North Rim Visitor Center inside the park or at the Kaibab Plateau Visitor Center at Jacob Lake (928) 643-7298. In winter contact the North Kaibab Ranger District, Kaibab National Forest, P.O. Box 248, Fredonia, AZ 86022 or call (928) 643-7395.

Kaibab Camper Village (Jacob Lake)

A commercial campground is located 1/4 mile/0.5 km south of Jacob Lake on Arizona Highway 67. Full hook-ups are available. May 15–October 15 phone (928) 643-7804. During off-season (928) 526-0924. Outside Arizona 1-800-525-0924.

Information

North Rim Visitor Center and Bookstore

Located near Grand Canyon Lodge. Park and regional information, maps, brochures, exhibits, and Grand Canyon Association bookstore. Open daily 8:00 a.m.–6:00 p.m.

Kaibab Plateau Visitor Center and Bookstore

Located at Jacob Lake, 45 miles/75 km north of the North Rim. Information, exhibits, ranger programs, Grand Canyon Association bookstore. Open as staffing permits. (928) 643-7298.

Fuel

Chevron Service Station

Located on the access road leading to the North Rim Campground. Open daily 7:00 a.m.–7:00 p.m.

Other Services

Laundry & Showers

Located on access road leading to the North Rim Campground. Open daily 7:00 a.m.–9:00 p.m. through Sept. 30 and Oct. 1–14 7:00 a.m.–7:00 p.m.

Post Office

Located in the Grand Canyon Lodge complex. Window service open Mon. through Fri. 8:00–noon and 1:00 p.m.–5:00 p.m. Closed Saturday, Sunday and holidays.

Books and Gifts

Located in the visitor center, the Grand Canyon Association bookstore is open daily 8:00 a.m.–6:00 p.m. The Gift shop located in Grand Canyon Lodge complex is open daily 8:00 a.m.–9:00 p.m. Some gift items are also available at the general store.

Lost & Found

For information about lost and found property contact the visitor center information desk or the Grand Canyon Lodge front desk.

Religious Services

Although the National Park Service does not endorse any group or message, services are offered in the park. See the bulletin board in the lodge for schedules.

Accessibility

Many North Rim viewpoints, facilities, and some trails are wheelchair accessible or accessible with assistance. Inquire at the visitor center for more details. Ask for a copy of the free *Accessibility Guide*.

Facilities

Restrooms at the visitor center, General Store, and Grand Canyon Lodge are wheelchair accessible. The lodge dining room and patios are accessible via a lift. Contact the Grand Canyon Lodge front desk for more information.


Campground

One restroom and two campsites are accessible.

Trails

Cape Royal Nature Trail is a 0.6-mile/1 km paved path with minimal elevation change leading to several points with canyon views.

Ranger Programs

Programs that are wheelchair accessible or accessible with assistance are indicated by this icon  in the program listing.

Wheelchairs

The National Park Service provides wheelchairs for temporary day use by park visitors. No rental fee is charged. A wheelchair is usually available at the visitor center. To obtain a temporary parking permit for designated parking, inquire at the visitor center.

Medical

Dial 911 from any pay phone or residence. Dial 9-911 from your cabin/motel room.

Weather Report

Posted daily in the visitor center. For recorded weather information phone (928) 638-7888 (updated at 7:00 a.m. daily).

Transport

Hiker Shuttle

A shuttle to the North Kaibab trailhead is available twice daily in the morning. Cost is \$6 for first person and \$4 for each additional person. Purchase tickets at Grand Canyon Lodge front desk. The passenger pick-up is in front of the lodge. Reservations are required 24 hours in advance.

Rim to Rim Transportation

Daily round-trip transportation between the North and South Rims is provided by Trans Canyon Shuttle. \$70 one-way and \$130 round-trip. Departs the North Rim at 7:00 a.m. and arrives at the South Rim at 11:30 a.m. Departs the South Rim at 1:30 p.m. and arrives at the North Rim at 6:30 p.m. Reservations are required. Call (928) 638-2820.

Tours and River Trips

Grand Canyon Trail Rides

One-hour rides along the rim and half-day rim or inner canyon trips are usually available on a daily basis. Full-day trips into the canyon include lunch. Register in the lobby of Grand Canyon Lodge at the Grand Canyon Trail Rides desk (open daily 7:00 a.m.–5:00 p.m.). For reservations call (435) 679-8665.

Colorado River Trips

Whitewater raft trips through the canyon last from 3 days to 3 weeks and require reservations well in advance (ask the visitor center staff for a *Trip Planner* with a list of river trip operators).

Half-day smooth water raft trips may be available on shorter notice through ARAMARK-Wilderness River Adventures, (800) 528-6154.

Other Areas

Exploring the Four Corners Region

Where Arizona, Utah, Colorado, and New Mexico join is the only spot shared by four states. This is a region of spectacular natural and cultural resources. Visiting any of the other National Park Service units will only add to the memories from your trip.

The Grand Circle

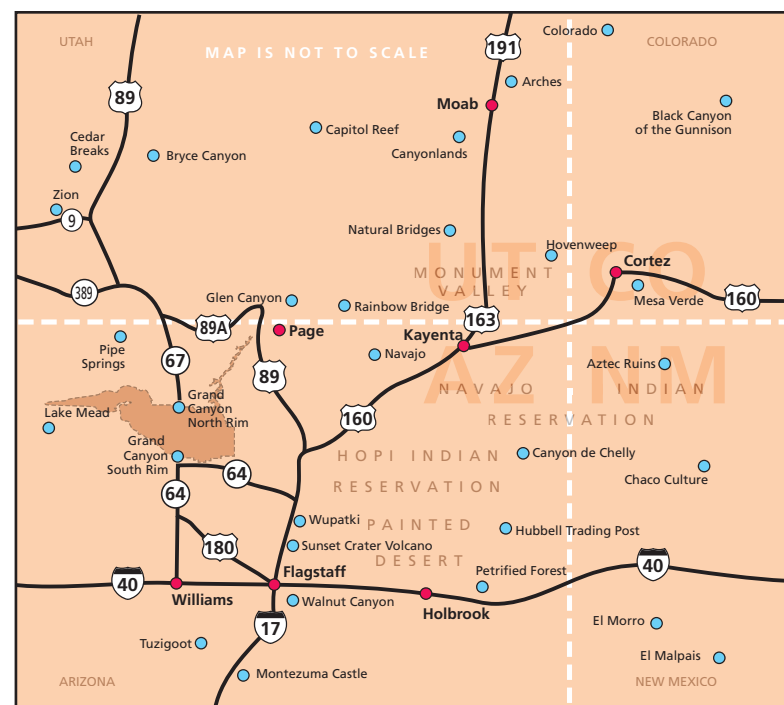
If you had visited southern Utah 75 years ago, you may well have arrived on the Union Pacific Railroad. Tour buses would meet your train at Cedar City and take you on a multiday tour to Bryce Canyon and Zion National Parks, Cedar Breaks National Monument, and the North Rim of Grand Canyon. This is still a wonderful tour of Utah's sandstone country.

Other Cultures

People have long populated this area. Visit the cliff dwellings of Mesa Verde National Park, the restored grand kiva at Aztec Ruins National Monument, the regional cultural center of Chaco Culture National Historical Park, or the towers of secluded Hovenweep National Monument. Many of the Indian reservations offer visitor or cultural centers.

Holes in the Rocks

Time and water have eroded the landscape into many awesome forms. If natural bridges or arches are your interest, explore Arches National Park or Natural Bridges National Monument. Or take the boat ride up Lake Powell to Rainbow Bridge. Don't miss the fanciful formations at Capitol Reef National Park.



Bookstore and Park Information



Grand Canyon Association

A nonprofit park partner since 1932

When you shop at the Grand Canyon Association bookstores at the North Rim Visitor Center and the Kaibab Plateau Visitor Center, your purchase helps support Grand Canyon National Park. In addition to the bookstores, park information and interpretive displays about Grand Canyon are available.

Ask about becoming a Grand Canyon Association member and how to receive discounts on purchases at Grand Canyon and other national parks or how to receive discounts on tuition for Grand Canyon Field Institute classes. Inquire at the bookstores or call (800) 858-2808.

To learn more about Grand Canyon Association classes, programs, books, and products visit www.grandcanyon.org. Shipping and mail order services available.

Visit the South Rim

The average distance across the canyon “as the condor flies” is ten miles (16 km). However, traveling from the North Rim to the South Rim requires a five-hour drive of 215 miles (345 km).

The South Rim is open year round. All visitor services—camping, lodging, and restaurants—are available. Reservations are strongly recommended during the busy summer season. Some facilities are closed during the winter.

A free shuttle bus system operates in the Grand Canyon Village area. Make your visit easier by parking your car and using the shuttle to get around. Make sure you stop at the new visitor center and Canyon View Information Plaza, which are reached only by shuttle.



National Park Service
U.S. Department of the Interior

Grand Canyon National Park

Post Office Box 129
Grand Canyon, AZ 86023

For the latest information updates, visit
Grand Canyon National Park's website at:
www.nps.gov/grca

The Guide is published by Grand Canyon National Park in cooperation with Grand Canyon Association. Printed by Arizona Daily Sun on recycled paper, using soy inks. © 2006 Grand Canyon Association  



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