How to See Grand Canyon

There is no "best way" to see Grand Canyon. However, visitors often seek recommendations about what to do or where to view the Canyon. For some, the answer may be to simply relax and enjoy the serenity. For others the following list may be helpful in deciding how to see the Canyon in the time you have available:

Two or Three Hours
Walk to Bright Angel Point to orient yourself. From the point you can see and hear Roaring Springs, the water source for the entire park. Also, there are good views of Bright Angel, Transept, and Roaring Springs side canyons as well as Grand Canyon Village on the South Rim, and San Francisco peaks in the distance.

Drive to Point Imperial (11 miles [18 km] from Grand Canyon Lodge) the highest point on either rim. See Mount Hayden, the Painted Desert, Saddle Mountain, and a beautiful view of eastern Grand Canyon National Park.

Half Day
In addition to the above activities, drive to Cape Royal (23 miles [37 km] from Grand Canyon Lodge and 14 miles [22 km] from the Point Imperial-Cape Royal roads junction). Here you may take the self-guided nature trail which winds its way to the point and a view of the Colorado River, as well as visiting Angels Window on the North Kaibab Trail. Even a short hike will allow you to comprehend the enormity of the Canyon.

Overnight
Watch the sunrise from Bright Angel Point or Cape Royal. Take a longer hike down the North Kaibab Trail. Spend the day at Roaring Springs, taking a lunch and water, and relax next to the falls. (Check with the Backcountry ranger at the Ranger Station for more information about how to hike safely.)

Drive to East Rim Drive, another picturesque spot for viewing the sunrise. Check at the Information Desk in Grand Canyon Lodge for directions to this dirt road located north of the park boundary. Attend the National Park Service evening program.

ATTEND A RANGER PROGRAM AT GRAND CANYON LODGE OR POINT IMPERIAL. SEE PROGRAM LISTING ELSEWHERE IN THE GUIDE.
Food & Beverage

**Grand Canyon Lodge Dining Room:** View of the Canyon. Breakfast, 6:30-10 a.m. full menu, 6:30-11 a.m. continental menu; lunch, 11:30 a.m.-2:30 p.m.; dinner, 5-9:30 p.m. daily. A complete list is available at the NPS Information desk, lodge lobby. For information call (602) 638-2292.

**Buffeteria & Snack Bar:** Located in the Grand Canyon Lodge Complex. Open 6:30-10 a.m., noon-4 p.m., and 6-9 p.m. daily.

**North Rim Pub & Game Room:** Located adjacent to the General Store near North Rim Campground. Open 4-11 p.m. daily.

**General Store:** Located across from North Rim Campground. Open 7 a.m.-9 p.m. daily (hours may vary with demand).

**Kaibab Lodge Dining Room:** Located 5 miles north of park boundary. Open daily for breakfast, lunch, and dinner. Reservations recommended. Call (602) 638-2389.

**Jacob Lake Lodge Coffee Shop & Dining Room:** Located 30 miles north of park boundary. Breakfast, 7-11 a.m.; lunch 11 a.m.-8 p.m.; dinner, 5:30-8 p.m. Coffee Shop open 6:30 a.m.-8 p.m. daily.

Religious Services

**Catholic Mass:** Saturdays at 6 p.m., Sunday at 8 a.m. in Grand Canyon Lodge recreation room.

**Interdenominational Services:** Presented by a Christian Ministry in the National Parks. Check for time and location of services at the bulletin board located near the post office.

**LDS Services:** Sundays, 3-5 p.m., at Lodge recreation room.

**Lost and Found:** For information about lost and found property, contact the National Park Service Information Desk located in Grand Canyon Lodge.

**Weather:** For recorded weather information call (602) 638-7888. Information updated at 7 a.m. daily.

Services for Special Populations

**Many North Rim viewpoints, facilities, and some trails are wheelchair accessible or accessible with assistance. Inquire at the Park Service Information Desk in the Lodge lobby for further details.**

**Facilities:** Restrooms at the Ranger Station and Grand Canyon Lodge are wheelchair accessible. Lodge dining room and patios are accessible via a lift. Contact the Grand Canyon Lodge front desk for additional information.

**Campground:** One restroom and two campsites are wheelchair accessible.

**Trails:** Cape Royal Nature Trail is a 0.5-mile paved path with minimal elevation change, leading to several points with Canyon views.

**Ranger Programs:** Programs which are wheelchair accessible with assistance are indicated by "*" in the program listing.

North Rim Health Services

**Medical Services:** North Rim Clinic is staffed by a Nurse Practitioner. Available Mon.-Sat. 9 a.m.-5 p.m. Call (602) 638-7888. Closed Sundays and holidays.

**Out-of-Park Services**

**Country Store & Gas Station:** Gas and diesel available all year. Located 5 miles north of park boundary. Diesel fuel, automotive supplies, groceries, camping and backpacking equipment rental and sales.

JACOB LAKE LODGE & GAS STATION: Located 30 miles north of park boundary. Gas station open 7 a.m.-8 p.m. daily.

Propane: Available at Jacob Lake.

Sunrise & Sunset

May 15 5:23 a.m. 7:27 p.m.
May 20 5:19 a.m. 7:31 p.m.
May 25 5:16 a.m. 7:35 p.m.
May 30 5:14 a.m. 7:38 p.m.
June 5 5:12 a.m. 7:42 p.m.
June 10 5:11 a.m. 7:45 p.m.
June 15 5:11 a.m. 7:45 p.m.
June 20 5:12 a.m. 7:47 p.m.
July 5 5:17 a.m. 7:49 p.m.
July 10 5:20 a.m. 7:48 p.m.
July 15 5:23 a.m. 7:46 p.m.
July 20 5:26 a.m. 7:44 p.m.
Mountain biking

The North Rim of Grand Canyon and the surrounding Kaibab National Forest offer many opportunities for riding mountain bicycles. Within the National Park bicycles are permitted on paved and dirt roads unless otherwise posted. Bicycles are not permitted on any trails. Several dirt roads offer a variety of interesting bicycle trips. These opportunities vary from short, relatively level routes, to remote viewpoints such as Cape Final, Francois Matthes Point, and Obi Point. More arduous trips may be planned for more than one day, such as the 17-mile road to Point Sublime. Park topographical maps and the Kaibab Forest map are useful for planning bicycle routes.

Historic Grand Canyon Lodge

Rugged, spacious, and informal, Grand Canyon Lodge has become for many visitors the essence of the North Rim. Its timbered ceilings, massive stone walls and dramatic vistas seem to be drawn directly from the natural features of Bright Angel Point. In 1982, the structure was added to the National Register of Historic Places.

Built by the Utah Parks Company, a subsidiary of Union Pacific Railroad, Grand Canyon Lodge opened for business on June 1, 1928. Consisting of a main building, one hundred standard cabins, and twenty-five deluxe cabins, the complex was designed by Gilbert Stanley Underwood. Also architect for the Ahwahnee Hotel in Yosemite Valley and the Lodge at Bryce Canyon, Underwood was instrumental in creating the rustic building style typical of many National Park structures completed during the 1920s and 1930s.

In the early morning hours of September 1, 1932, Grand Canyon Lodge and two deluxe cabins were destroyed by the largest structural fire in the park's history. Due to financial constraints typical of the Great Depression years, reconstruction was postponed until the winter of 1936-37. Still based upon Underwood's floor plan and palette of materials, the new Lodge retains much of the character of its predecessor. Using natural rough-hewn limestone and timbers, the structure complements rather than intrudes upon the canyon and rim environment.

The Lodge is a product of the economic prosperity of the "Roaring Twenties" and the bitter realities of the "Great Depression." It serves today as a reminder of those eras and as a tribute to American craftsmanship and architecture. Utah Parks Company owned and operated the complex until 1972 when their North Rim holdings were donated to the National Park Service. A concessionaire leases the facilities through a government contract.

The National Park Service Information Desk is located in the Grand Canyon Lodge lobby.

Grand Canyon Quiz

1 How many people visit the Grand Canyon each year?
   a) 750,000  b) 8,000,000  c) 4,000,000  d) 1,000,000

2 The Grand Canyon is an average 10 miles wide because:
   a) the river was once 10 miles wide.
   b) a huge earthquake split the Kaibab Plateau.
   c) wind, rain, and flash flood widened the canyon after the river cut the depth.
   True  False

3 Two-thirds of the Grand Canyon is on the north side of the river.
   True  False

4 Major environmental issues which concern the Grand Canyon include:
   a) air quality, b) nearby uranium mining, c) overcrowding, d) aircraft noise, e) all of the above.
   a) 5,000, b) 15,000, c) 30,000, d) 50,000

5 In an average year there are:
   a) 5,000, b) 15,000, c) 30,000, d) 50,000

6 The number of people who fall off the canyon rim and die each year averages:
   a) 5, b) 10, c) 20, d) 25.

7 How many people each year hike to the bottom of Grand Canyon and stay overnight?
   a) 150, b) no one, there is no way down, c) 250,000, d) 50,000.

8 The record time for running from the North Rim to the South Rim (a distance of 22 miles) is:
   a) 2 days 4 hours, b) 12 hours 12 minutes, c) 8 hours 5 minutes, d) 3 hours 9 minutes.

9 If you see a deer along the road you should:
   a) feed the poor, hungry animal, b) stop immediately in the road and take a picture, c) reduce speed, stopping only if there is a wide shoulder or turn-out.

10 The oldest rocks of Grand Canyon are approximately:
    a) 6 thousand years old, b) 137 million years old, c) 2 billion years old, d) half as old as the earth itself.

11 The average snowfall at the North Rim is:
   a) 2 ft, b) 6 ft., c) 12 ft., d) 20 ft.

Answers may be found on the last page of The Guide.

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Answers may be found on the last page of The Guide.

Become a junior ranger

Grand Canyon National Park offers a Junior Ranger program for children up to age 12. To take part in the program pick up a copy of the Young Adventurer, a special newspaper just for kids, and complete the activities outlined for the Junior Ranger Program. Copies of the Young Adventurer are available at the Grand Canyon Lodge Park Service Information Desk.
Hiking on the North Rim

There is only one Grand Canyon. It belongs to everyone. During your visit we ask that you respect the rights of others. Please carry out your trash.

Leave all fossils, rocks, plants and animals as you find them so those who come after you may also enjoy them. Throwing or rolling rocks may injure people below you.

Vehicles, including bicycles, are allowed only on paved or designated roads. Stay on trails. Cutting across switchbacks can be dangerous for both you and those below you, and it increases erosion.

Litter has become a problem on many trails. Carry trash to proper receptacles and remember that cigarette butts are litter too.

Mules have the right-of-way on the trail. If you meet a mule string, stand quietly by the side of the trail and obey any instructions given by the wrangler.

A hike into the Canyon will test your mental and physical endurance. Know and respect your limitations. Rangers will be glad to help you plan a hike within your capabilities.

Hiking reservations and permits

Permits are required for overnight hiking only; day hikes do not require a permit.

Overnight reservation requests should be sent to:

Backcountry Reservations Office
P.O. Box 129
Grand Canyon, AZ 86023

Hikers arriving without reservations should contact the North Rim Backcountry Reservations Office (BRO). Located at the Ranger Station, the BRO is open 7-11 a.m. and 4-5 p.m. daily. It may be possible to obtain a Backcountry Use Permit by placing your name on a waiting list for cancellations. The waiting list is started when the BRO opens, the day before the hike would begin. Names will be taken on PERSON ONLY. Hikers on the waiting list must be present at 9 a.m. on the day of the hike to check on availability of permits.

Ticks

Ticks carrying relapsing tick fever have been known to occur on the North Rim. They carry a treatable disease. The symptoms which develop in 5-15 days include nausea, fatigue, muscle weakness, and headaches. If you have these symptoms after your visit to the Grand Canyon, contact your physician, and the Arizona Department of Health (602) 230-5918.

Pets

Pets must be physically restrained at all times. They are not allowed on trails. The only trail that they are allowed on is the Boulde Path which connects the Lodge with the North Kaibab Trail. The only exception is guide dogs for people who are blind or deaf.

Tips for a Safe Visit

Did you know that Federal law requires you to wear seatbelts while driving in a National Park? So buckle-up. It's the law in Grand Canyon.

To help make your visit to Grand Canyon safe and enjoyable, here are a few tips from the National Park Service.

• Watch your children. Your hand and voice may be too far away once your child has climbed over a barrier or wall.

• Keep your distance from wildlife. Do not feed, touch, or disturb animals in the park. Rodents may bite and large animals have been known to kick when startled.

• Find a friend. Most hiker fatalities occur with solo hikers. Make sure someone knows your plans. Overnight stays in the Canyon require a free permit. Ask a ranger for permit information.

• Pay attention to weather changes. Use caution when walking near the canyon rim and driving in the Park, especially in rainy or snowy conditions.

• Know your limits. Elevation on the North Rim is 8,200 feet above sea level. People with heart and respiratory problems should be especially cautious about over exertion.

• Keep track of your belongings. Remove all valuables from your car and trunk. Immediately report any suspicious activity to a ranger. Thieves work quickly.

• Bicycles are permitted only on primary paved roads, secondary dirt roads and fire roads. Helmets are strongly recommended, and headlights and reflectors are required at night.

• Bicycle use is strictly prohibited off-road and on trails. Violators will be cited and fined, and their bicycles confiscated.

• Obey posted speed limits.

• Protect your park. Grand Canyon National Park is fully protected by federal law to preserve it for future generations. Do not disturb or remove any natural or cultural feature, including fossils, rocks, plants, animals, and artifacts.

• Parking in handicapped areas is restricted to vehicles displaying handicapped license plates. Temporary parking permits are available at Grand Canyon Lodge Park Service Information Desk.

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For decades, visitors from all over the world have come to northern Arizona to see the Grand Canyon. Today there is evidence that we are seeing less of it than we used to, and about half of the reduction in visibility at the Grand Canyon may be due to human sources.

A growing body of scientific data collected over the past twelve years has enabled National Park Service (NPS) researchers to characterize the air quality at the Grand Canyon, to identify the causes of poor visibility, and to begin to pinpoint sources of these pollutants. For example, recent research shows that the Navajo Generating Station, a coal-fired power plant located about 100 miles northeast of Grand Canyon Village near Page, Arizona, may contribute significantly to reduced wintertime visibility at the Grand Canyon.

In 1916, when the NPS was established by Congress, the new agency was directed to "conserve the scenery and the natural objects . . . and to provide for the enjoyment of the same in such manner . . . as to leave them unimpaired for future generations." Preserving air quality was implied in this statement, but specific laws to protect air resources, especially visibility, came in 1977 when Congress amended the Clean Air Act with provisions to "remedy any existing and prevent any future manmade visibility impairment" in "Class I" areas. The Grand Canyon was designated a Class I area at this time, along with 47 other units of the national park system.

Charged with the responsibility for protecting air quality in these areas, the National Park Service began an extensive program of research and monitoring in order to fulfill this obligation.

Through an ongoing program coordinated by the NPS Air Quality Division in Denver and Fort Collins, Colorado, park personnel have collected data in the field using equipment as simple as 35mm cameras and as sophisticated as computers. Combined with knowledge of weather and wind patterns, this information has enabled the National Park Service to determine the causes and sources of poor visibility in many park service areas. Visibility is reduced by natural sources such as water droplets, forest fires, and windblown dust, but research suggests that the single most important contributor to poor visibility nationwide is fine sulfate particles. These are primarily the result of sulfur oxide emissions from power plants and other industrial sources.

At the Grand Canyon, analysis shows that about half of the visibility reduction is due to sulfate particles. During the summer months, this pollution comes from distant sources, whereas, in the winter, local sources are more prominent. The Navajo Generating Station was suspected as a source because it has no sulfur dioxide (SO2) emission control equipment. This plant is now estimated to be the single largest SO2 emission source in the west.

To test this assumption, the NPS, in cooperation with the Environmental Protection Agency (EPA) and the electric utility industry, conducted the Winter Haze Intensive Tracer Experiment (WHITEX) for six weeks during the winter of 1987.

This was a region-wide field study to see if winter haze at Grand Canyon National Park was due to source emissions. The Navajo Generating Station could be one of many sources of pollution. In addition to a stepped-up program of visibility and particulate monitoring, a chemical tracer was injected into the stacks of the plant. The tracer was then analyzed to determine what percentage of the sulfur emissions were coming from the plant.

Analysis of the WHITEX data indicates that about 70% of the sulfate particles were not coming from the plant. The NPS concludes that the Navajo Generating Station is "a major contributor to poor visibility" at Grand Canyon.

Under certain conditions a combination of manmade pollutants and natural sources reduces the range of visibility to less than 80 miles.
**PUBLICATIONS**

**BOOKS**

ALONG THE RIM by Nancy Loving. A brief discussion of plant and animal life on the South Rim, and guide to points along East and West rim drives from Desert View to Hermit Rest. 66 full-color and black-and-white photographs, 4 four maps, landmark keys. 52 pp. $2.95

GRAND CANYON GEOLOGY ALONG BRIGHT ANGEL TRAIL by David Thayer. This lucid explanation of Grand Canyon geology contains 50 photos, 30 line drawings, and 5 section maps of Bright Angel Trail. 6"x8-1/2" wirebound. 100 pp. $8.95

**TRAIL GUIDES**

POCKET-SIZE GUIDES

An informative series of trail guides containing information about the cultural and natural history of the area, as well as trail maps and photographs. 20-48 pp. $2.95 each

BRIGHT ANGEL HERMIT GRANDVIEW NORTH KAIBAB HAVASU SOUTH KAIBAB NEW! BASS, NORTH & SOUTH

GUIDE TO HIKING THE INNER CANYON by Scott Thybony. Descriptions and maps of major trails and routes in Grand Canyon National Park. Includes information on backcountry reservations, safety, and minimum impact hiking. 43 pp. $2.95

**VIDEO**

RIVER SONG: A NATURAL HISTORY OF THE COLORADO RIVER, narrated by Richard Chamberlain. The river is the lifeblood of the Grand Canyon, yet because of its remoteness it was not explored completely until 1869. Even today it is a challenge to the adventurer. In this award-winning film we see animals, plants, geology, and the great river itself. 40 minutes. VHS, PAL. $29.95

**POSTERS**

CANYON NATURE POSTER. Canyon rim setting filled with native birds, insects, reptiles, and plants. Drawn by distinguished artist Lawrence Ormsby. Full Color. Includes key. 37"x25" $5.00

"I AM TEN THOUSAND CATHEDRALES ROLLED INTO ONE." Tom Bean photograph shows Grand Canyon at its most dramatic. 11"x14" $4.00

**MAPS**

GEOL O GIC MAP OF EASTERN PART OF GRAND CANYON NATIONAL PARK by Breed, Huntoon, and Billingsley. Colorful map graphically shows geologic formations of the Grand Canyon. $6.00

GEOL O GIC MAP OF HURRICANE FAULT ZONE AND VICINITY WESTERN GRAND CANYON, ARIZONA by Huntoon, Billingsley, and Clark, 1981 edition. $6.00

GEOL O GIC MAP OF LOWER GRANITE GORGE AND VICINITY, WESTERN GRAND CANYON, ARIZONA by Huntoon, Billingsley, and Clark, 1982 edition. $6.00

GEOL O GIC MAP OF VULCANS THRONE AND VICINITY, WESTERN GRAND CANYON, ARIZONA by Huntoon, Billingsley, and Clark, 1983 edition. $6.00

**CASSETTE**

CANYON LIFESONGS by Rita Cantu. 45 minutes of mellower vocals and orchestration. Songs written about and in the canyonlands of the Colorado Plateau, and performed by the composer. $9.95

FOR CHILDREN

WHERE DO I LOOK? by Franklin and Huey. A child's look at the Grand Canyon provides the opportunity to recognize where we all fit in the scheme of nature. For young children. 42 B/W photographs. 40 pp. $7.50


NEW!

GRAND CANYON WILDFLOWERS by Phillips and Richardson. A field guide to the wildflowers of the Grand Canyon area. 160+ color plates representing 140 species. Quick reference to color, location and blooming season. 145 pp. $15.95

GRAND CAÑON POSTER. Photographs by Christopher Brown combine with words of John Wesley Powell to create a moving experience of the Canyon. 18"x24" $5.00

WILD ANIMALS FACE TO FACE. A set of seven animal masks painted by wildlife artist Elizabeth McClelland. Coyote, Bighorn, Tassel-eared squirrel, Ringtail, Horned lizard, Monarch butterfly, Raven. Each mask 5"x7" or larger. Set $7.95

**POSTERS**

160+ color plates representing 140 species. Drawn by distinguished artist Lawrence Ormsby. Full Color. Includes key. 37"x25" $5.00

"I AM TEN THOUSAND CATHEDRALES ROLLED INTO ONE." Tom Bean photograph shows Grand Canyon at its most dramatic. 11"x14" $4.00

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**PROGRAMS**

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*Indicates program is wheelchair assessable with assistance.

**Quiz answers**

1. “C” 4 million visitors per year.
2. “C” The river cuts the depth of the canyon and carries away sediments.
3. “True” Because the Kaibab Plateau slopes toward the south, runoff from the North Rim flows into the near the rim.
4. “E” Many serious problems threaten Grand Canyon, making it important that citizens become involved in park protection.
5. “D” Stopping in the road creates a hazard, and it is unlawful to feed animals within the park.
6. “C” Winter 1990 snowfall totaled 8 ft. (2.44 m).
7. “D” 300,000 hikers venture into the Canyon each year, 50,000 stay overnight.
8. “D” Running across the canyon is not recommended, and should be attempted only by experienced runners who have trained extensively for the trip. In 1988 there were 173 helicopter evacuations and 300 medical assists for people who hiked farther than they should have.
9. “C” Radiometric dating of igneous intrusions in the Vishnu Group gives an age of nearly 1.7 billion years. The Vishnu is older than the intrusions in it.
10. “C and D” Radiometric dating of igneous intrusions in the Vishnu Group gives an age of nearly 1.7 billion years. The Vishnu is older than the intrusions in it.