



# 2023 Park Profile



Havasupai Gardens Renaming Ceremony, May 4, 2024.

## Authorization

- 1882: First unsuccessful attempt to establish a Grand Canyon National Park.
- 1893: Designated a “forest reserve” by President Benjamin Harrison (Presidential Proclamation #45).
- 1908: Establishment of Grand Canyon National Monument by President Theodore Roosevelt (Presidential Proclamation #794).
- 1919: Designated as Grand Canyon National Park by an act of Congress on February 26 (40 Stat 1175).
- 1975: Grand Canyon National Park Enlargement Act enacted by Congress on January 3 (88 Stat 2089) (Public Law 93-620).
- 1979: Designated a World Heritage Site on October 26.
- 2013: Designated as a Globally Important Bird and Biodiversity Area by BirdLife International.
- 2019: Designated an International Dark Sky Park (IDSP) by the International Dark-Sky Association.

## Park Statistics

### Grand Canyon National Park

#### Park Size:

- 1,218,375 acres (493,059 ha);
- 1,904 square miles (4,931 km<sup>2</sup>).

Length: 278 river miles (447 km).

#### Width:

- Minimum at Marble Canyon, 600 feet (180 m);
- Average Rim to Rim: 10 miles (16 km);
- Maximum Rim to Rim: 18 miles (28.8 km).

Depth: Average 1 mile (1.6 km).

#### Elevations:

- South Rim 7,000 feet (2,100 m);
- North Rim 8,000 feet (2,400 m).

Volume: 5.45 trillion cubic yards (4.17 trillion m<sup>3</sup>).

### Colorado River in Grand Canyon National Park

Length: 278 miles (447 km).

Average Width: 300 feet (90 m).

Minimum Width: 76 feet (23 m).

Average Depth: 40 feet (12 m).

Greatest Depth: 85 feet (25.5 m).

Average Gradient: 7 feet per mile (1.3 m/km).

Elevation at Phantom Ranch: 2,400 feet (720 m).

The Colorado River is 1,450 miles (2,333 km) long from its source in the Rocky Mountains of Colorado to the Gulf of California.

# Geology

Grand Canyon National Park preserves an iconic geologic landscape and resources ranging from 1.8 billion (Pre-Cambrian) year-old igneous and metamorphic rocks to 230 million (Triassic)-year-old sedimentary rocks, 5 million (Pliocene)-year old to recent volcanic deposits, a complex tectonic and erosional history, and unconsolidated surface deposits.

The Colorado River established its course through the canyon approximately 6 million years ago and likely evolved from pre-existing drainages to its current course. Geologic processes, including erosion of tributaries and slopes, and active tectonics continue to shape the canyon today. The geologic record in Grand Canyon is an important scientific chronicle and is largely responsible for its inspirational scenery.

Paleontology resources include nearly 300 diverse and globally significant fossil localities ranging from 1.2-billion-year-old stromatolites to Paleozoic trilobites, plants, reptile tracks, and marine invertebrates, and Pleistocene megafauna in caves.



View from Plateau Point.

# Plant and Animal Life

## Animals

Birds: 450 species.

Mammals: 91 species.

Fish: 18 species, 5 native.

Reptiles and Amphibians: 58 species.

Invertebrates: 1,443 species, including 292 butterflies and moths.

Exotic (non-native) animals: 30 species.

Park Endemic animals, not extirpated: 9 species; 5 butterflies, 1 pseudoscorpion, 1 tarantula, 1 snake, 1 mollusk.

Regionally Endemic animals, not extirpated: 5 species; humpback chub, razorback sucker, flannelmouth sucker, Kaibab squirrel, and Navajo Mexican vole.

One reptile, three mammals, and one mollusk species are known only from the Grand Canyon region. At least nine species of insects are endemic to Grand Canyon, and six fish species are endemic to the Colorado River basin.

## Extirpated Species

Grizzly bear, black-footed ferret, gray wolf, jaguar, Bear Valley sandwort, Colorado pikeminnow, bonytail, roundtail chub, and southwestern river otter.

## Plants

Vascular Plants: 1,737 species.

Endemic Plants: 10 species.

Exotic (non-native) Plants: 208 species.

## Vegetation Formations

6 types: riparian, desert scrub, pinyon/juniper woodland, ponderosa pine forest, spruce/fir forest, and montane meadows/sub-alpine.

## Endangered/Threatened

Animals: California condor, humpback chub, razorback sucker, southwestern willow flycatcher, Mexican spotted owl, Ridgway's rail, yellow-billed cuckoo, and desert tortoise. There are over 35 species of special concern.

Plants: The sentry milk-vetch (*Astragalus cremnophylax* var. *cremnophylax*) is the only endangered plant in the park. There are no listed threatened plant species. Nine species of special concern (formerly category 2 species) are known, and 25 additional vascular plants are of management concern due to their limited distribution.



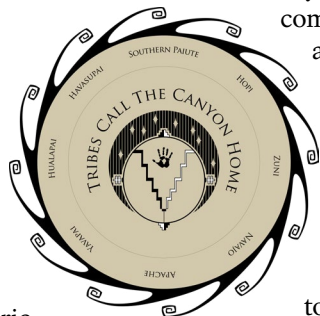
Datura flower.



# Human History

The oldest human artifacts found date to the Paleoindian period and are nearly 12,000 years old. Since that time, people have continually used and occupied lands that became the park. Archaeological evidence from the following ancestral groups have been found in Grand Canyon National Park: Paleoindian, Archaic, Basketmaker, Ancestral Puebloan (Kayenta and Virgin branches), Cohonina, Cerbat, Pai, and Southern Paiute. Historical-period cultural groups include the Hopi, Navajo, Pai, Southern Paiute, Zuni, and Euro-American.

There are currently 3,391 ancestral sites documented within the park dating to the prehistoric period, representing approximately 7% of park lands inventoried. In addition, park records document evidence of historic period use from 1540-1950, including 453 locations with evidence of historic Native American use.



# Tribal Partners

Grand Canyon is home to 11 federally recognized tribes with deep history and connection to the Grand Canyon since time immemorial. Tribal governments and communities work closely with park administration and management on a host of programs. Through collaborative projects such as the Desert View Watchtower Intertribal Cultural Heritage Site, the park is working with tribes to provide accurate and culturally appropriate information to visitors. This “First Voice” programming acknowledges the rich and diverse cultural history of the Grand Canyon and celebrates the connections native people have to the Canyon. Tribal lands surrounding the park offer many unique tourism opportunities to visitors planning a Grand Canyon trip.



Greg Hill, Hopi toy top maker.



“Star” Blandford & Chairwoman Bow of Paiute Indian Tribe of Utah.



Evanette Sockyma from Hopi.



Henry Jackson, Navajo/Diné.

# Climate

Climate in Grand Canyon National Park is relatively mild. However, low humidity generally allows large temperature differences between day and night.

Since precipitation totals are low, year-to-year variations can be large. The passage of a few major storms can have a significant impact on the year’s total.



Deep snow on Grandview Trail.

## South Rim

Mean High Temperature-30 yrs: 64°F (17.8°C).  
 Mean Low Temperature-30 yrs: 29.5°F (-1.4°C).  
 Avg. Annual Precipitation-30 yrs: 13.36 inches (33.93 cm).  
 Total Precipitation in 2023: 14.77 inches (37.52 cm).  
 (3 days of missing data).

## North Rim

Mean High Temperature-30 yrs: 55°F (12.8°C).  
 Mean Low Temperature-30 yrs: 31.7°F (-0.2°C).  
 Avg. Annual Precipitation-30 yrs: 24.18 inches (61.42 cm).  
 Total Precipitation in 2023: 36.75 inches (93.35cm).  
 (23 days of missing data).

## Phantom Ranch

Mean High Temperature-30 yrs: 81°F (27.2°C).  
 Mean Low Temperature-30 yrs: 54.2°F (12.3°C).  
 Avg. Annual Precipitation-30 yrs: 9.63 inches (24.46 cm).  
 Total Precipitation in 2023: 11.31 inches (28.73 cm).  
 (5 days of missing data).



# Development

## Buildings

Total: 1,182.  
National Park Service: 647.  
Concessioners: 535.

## Trails

Paved: 35 miles (56.3 km).  
Unpaved: 560 miles (901.2 km).  
Total: 595 miles (957.6 km).

## Roads

Paved: 124 miles (199.6 km).  
Unpaved: 148 miles (238.2 km).  
Total: 272 miles (437.7 km).

## Sewage Treatment Facilities

Total: 4.

## Trans-canyon Waterline (TCWL)

*Water from Roaring Springs to North and South rims.*  
Total: 23 miles (37 km).

## Lodging Units

South Rim: 908.  
North Rim: 219.  
Phantom Ranch: 15.

## Recreational Vehicle Sites

Total: 123.

## Rim Campsites

Mather: 317 family, 7 group, 2 hiker/biker, 2 livestock.  
Desert View: 50 family.  
North Rim: 90 family, 3 group.  
Tuweep: 9 family, 1 group.

## Visitor Facilities

Visitor centers, museums, theaters, backcountry offices, historic structures, scenic overlooks, accessible rim trails, lodging, campgrounds, dump stations, service stations, restaurants, cocktail lounges, coffee shops, general stores, gift shops, bookstores, clinic, bank, post offices, churches, and a kennel. Some facilities are seasonal.

## Visitor Services

Services include educational exhibits, curriculum-based education programs, junior ranger programs, ranger programs and hikes, picnicking, bicycling, bike rentals, self-guided hikes, mule riding, backpacking, fishing, river trips, overnight lodging, camping, camper services, guided bus tours, air tours (outside of park), shuttle bus service, taxi, auto repair, publication sales, gift and grocery sales, law enforcement, and medical and emergency services.

## Concessioners

In Fiscal Year 2023, 21 concessioners grossed approximately \$203 million and paid franchise and other fees of approximately \$19 million.



A heavy-lift helicopter delivers equipment.



Trail crew staff building a walkway to increase accessibility at Desert View.



Workers installed pull lines made of heavy-duty rope through existing pipe.



A sound study is conducted by Supai Tunnel to get baseline noise data.



Construction workers slipline new Flex-Steel pipe into the existing waterline.



Exterior walls for the new SR water treatment plant.



# Historic Resources

## National Historic Landmarks

- Buildings: 4.
- Districts: 3.
- Sites: 1.

## National Register of Historic Places

- Buildings: 8.
- Districts: 10.
- Sites: 2.
- Structures: 1.

National Register properties include archaeological sites, historic structures, cultural landscapes, and ethnographic resources. The park is working with the University of Arizona and tribes to prepare a nomination for the Grand Canyon as a Traditional Cultural Place. The work will be completed in 2022.

## List of Classified Structures (LCS): 874

LCS includes National Historic Landmark and National Register listed or eligible properties.

## Cultural Landscapes: 16

# 2023 Visitation

## Total Visitation

- 2019 Total: 5,974,411;
- 2020 Total: 2,897,098;
- 2021 Total: 4,550,921;
- 2022 Total: 4,732,101;
- 2023 Total: 4,733,705.

## Shuttle System Passengers

*The shuttle system was implemented in 1974. Year-round shuttle service began March 10, 2000.*  
4,745,966 boardings (not passengers).

## Backpacking User Nights

- Total: 72,915.
- Corridor: 42,217.
- Other Backcountry Trails: 30,637.
- Backcountry permits issued: 10,303.
- Backcountry permits used: 10,242.

## Colorado River Trip User Days

*Lees Ferry to Diamond Creek*

- Commercial: 109,493;
- Noncommercial: 108,492.

*Diamond Creek to Pearce Ferry*

- Noncommercial: 12,587.

## Mule Trip Riders

*Xanterra, South Rim:*

- Phantom Ranch 1 night: 628;
- Phantom Ranch 2 nights: 34;
- Canyon Vistas: 9,472.

*Canyon Trail Rides, North Rim:*

- One Hour Rim Ride: 2,208 ;
- Half Day Inner Canyon Ride: 2,510;
- Half Day Rim Ride: 607.

## Train Passengers

*North-bound boardings:*  
Total: 187,901.



President Biden and Superintendent Keable at Yaki Point.



Tribal Coalition Meeting on the Baaj Nwaavjo I'tah Kukveni Grand Canyon National Monument at the Horace Albright Training Center.



# 2023 Interpretive Services and Activities

## Visitor Centers and Contact Stations

Grand Canyon Visitor Center,  
Verkamp's Visitor Center,  
Yavapai Observation Station,  
Desert View Visitor Center,  
North Rim Visitor Center,  
Kolb Studio,  
Havasupai Gardens (renamed 2022),  
Phantom Ranch.

## Environmental Education Programs

Field Trips: 44 programs to 1,521 students.  
Distance Learning: 156 programs to 6,405 students.  
Classroom: 14 programs to 345 students.

## Interpretive Walks, Talks, and Programs

Formal Programs: 556 programs to 20,897 visitors.  
Dark Skies Programs: 198 programs to 33,759 visitors.  
Informal roves and pop-ups: 165 to 9,544 visitors.  
Grand Canyon Visitor Center desk: 173,387 contacts  
*(Open 6 hrs/day from October 22-March 23, 7 days a week. Closed Christmas Day & New Years Day. Open 4 hrs/day from April 23 - September 23, 5 days a week, closed two weeks in April).*

## Digital and Social Media (2023 Statistics)

Facebook followers: 786,243.  
Instagram followers: 866,000.  
Twitter followers: 287,533.  
Total nps.gov/grca page views: 14,266,129.



Ranger program at Phantom Ranch.



Grand Canyon Speaks program at Desert View.



Ranger-guided hike on the North Rim.

# 2023 Visitor and Resource Protection

## Law Enforcement Activities

Total Number of Criminal Cases: 3,146.  
Arrests: 61.  
Part I Offenses Investigated: 446.  
Part II Offenses Reported: 2,675.  
Law Enforcement Jurisdiction: Concurrent.

## Emergency Medical Services

Emergency Medical Service Incidents: 1,083.  
Fatalities: 10.

## Search and Rescue Incidents (SAR)

Total: 302.

## Preventive Search and Rescue (PSAR)

Total Contacts: 142,370.  
Preventative Actions: 27,184.  
Hiker Assists: 455.

## Structural Fire Incidents and Responses

Total: 156.

## Wildland Fire Incidents and Treatments

Fire Start Incidents: 10 South Rim, 8 North Rim.  
Acres treated with wild & prescribed fire: 912 South Rim, 1,920 North Rim.  
Acres of defensible space treated: 187.



Search and Rescue Class.



Atoko Fire on the North Rim.



Washing the new fire engine.



# Administration

## FY 2023 Funding

Operation of the National Park System (ONPS):  
ONPS Base Operating Appropriation: \$24,626,151;  
ONPS Non-base Funding: \$670,900 (*Includes funding for North Rim Landslide and Pipeline Repair*).  
Special Emphasis Program Allocation (SEPAS):  
Repair and Rehabilitation: \$1,631,638.69.

## Federal Lands Recreation Enhancement Act—80% portion

(FY-14) \$8,407,057 (collections reduced by LSI buy down);  
(FY-15) \$18,361,846;  
(FY-16) \$15,215,281 (collections reduced by Pipeline reserve);  
(FY-17) \$11,739,334 (collections reduced by Pipeline reserve);  
(FY-18) \$16,263,449;  
(FY-19) \$15,788,360;  
(FY-20) \$16,411,907;  
(FY-21) \$15,021,494;  
(FY-22) \$19,027,587;  
(FY-23) \$19,372,707.

## Income 2023

Utilities Reimbursable: \$4,859,425.  
Quarters: \$2,466,675.  
Concession Franchise Fees—20% Portion: \$3,772,285.  
Filming and Location Fees: \$13,015.  
Donations (monetary): \$407,470.  
Transportation (Shuttle Buses): \$5,200,100.  
Cost Recovery: \$2,012,880.  
Other (reimbursable, refundable, etc.): \$1,229,725.

## National Park Service Staffing—FY 2023

*Information and distribution of all staff (Permanent, Term, and Seasonal):*

Superintendent's Office: 18;  
Administration: 35;  
Science and Resource Management: 39;  
Commercial Services: 12;  
Planning, Environment, and Projects: 25;  
Facility Management: 116;  
Interpretation: 33;  
Visitor and Resource Protection: 125;  
Fire and Aviation Management: 21.

## Total National Park Service Staffing

(FY-19) 372;  
(FY-20) 503;  
(FY-21) 584;  
(FY-22) 407;  
(FY-23) 424.

## Volunteers-in-Parks (VIP) Program

*Volunteer hours by category:*

Administration: 302.5;  
Campground Host: 7,583.25;  
Cultural Resource Management: 603.25;  
Interpretation/Education: 8,252.75;  
Maintenance: 1,552.25;  
Natural Resource Management: 2,279.75;  
Protection/Law Enforcement: 12,941.75.

*In-Kind Service Amount:*

Total volunteers in park: 507;  
Total hours: 33,515.5;  
National value of each volunteer hour: \$31.80;  
Total in-kind services: \$1,065,792.90.



Convening with Arizona Governor Katie Hobbs and Arizona Tribal Leaders.

# Partnerships and External Affairs

## Gateway Communities & Counties

Flagstaff, AZ;  
Fredonia, AZ;  
Jacob Lake, AZ;  
Kanab, UT;  
Tusayan, AZ;  
Williams, AZ;  
Coconino County, AZ;  
Garfield County, UT;  
Kane County, UT;  
Mohave County, AZ;  
Washington County, UT.

## Traditionally Associated American Indian Tribes

Havasupai Tribe, AZ;  
Hopi Tribe, AZ;  
Hualapai Tribe, AZ;  
Kaibab Band of Paiute Indians, AZ;  
Las Vegas Band of Paiute Indians, NV;  
Moapa Band of Paiute Indians, NV;  
Navajo Nation, AZ;  
Paiute Indian Tribe of Utah, UT;  
San Juan Southern Paiute Tribe, AZ;  
The Pueblo of Zuni, NM;  
Yavapai-Apache Nation, AZ.

## State and Federal Partners

Arizona Game and Fish Department, AZ;  
Bryce Canyon National Park, UT;  
Bureau of Land Management, AZ/UT;  
Bureau of Reclamation;  
Flagstaff Area National Monuments, AZ;  
Glen Canyon National Recreation Area, UT/AZ;  
Grand Canyon Parashant National Monument, AZ;  
Kaibab National Forest, AZ;  
Lake Mead National Recreation Area, AZ;  
Pipe Spring National Monument, AZ;  
U.S. Geological Survey;  
Vermilion Cliffs National Monument, AZ;  
Zion National Park, UT.

## Philanthropic & Community Partners

Grand Canyon Conservancy;  
National Park Foundation;  
Arizona Trail Association;  
Grand Canyon River Guides;  
Grand Canyon Music Festival.

## Arizona Congressional Representatives

Senator Kyrsten Sinema;  
Senator Mark Kelly;  
Second District Representative Eli Crane;  
Ninth District Representative Paul Gosar.



## Park Information

### Superintendent

Ed Keable

### Media Contact

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### Website

[www.nps.gov/grca](http://www.nps.gov/grca)

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