

Zion National Park Profile 2016

Overview

Located in Washington, Iron and Kane Counties in Southwestern Utah, Zion National Park encompasses some of the most scenic canyon country in the United States. The park is characterized by high plateaus, a maze of narrow, deep, sandstone canyons and striking rock towers and mesas. Zion Canyon is the largest and most visited canyon in the park. The North Fork of the Virgin River has carved a spectacular gorge here, with canyon walls in most places rising 2000-3000 feet above the canyon floor. The southern part of the park is a lower desert area, with colorful mesas bordered by rocky canyons and washes. The northern sections of the park are higher plateaus covered by forests.

Mission Statement

The Zion National Park mission is to preserve the dynamic natural process of canyon formation as an extraordinary example of canyon erosion and to protect and preserve the valuable cultural, geologic, vegetation and wildlife resources while providing safe, sustainable and cost-efficient access for visitors' experience and enjoyment. In addition, the park aims to educate both visitors and the general public about this exceptional environment.

Establishment

Zion National Park was originally protected by Presidential Proclamation on July 31, 1909 as Mukuntuweap National Monument by President William Howard Taft. On March 18, 1918 the monument was enlarged and the name changed to Zion National Monument. The enlargement was effected to protect "unusual archeological, geologic and geographic interests...", and to provide opportunities for visitor enjoyment of its grandeur and scenic features. The area received National Park status by the provisions of the Act of November 19, 1919. Subsequent Presidential Proclamation of January 22, 1937 by Franklin Delano Roosevelt, established Zion National Monument (Kolob Canyons today) adjacent to the then existing park. The park and monument were combined in 1956 by an act of Congress.

Name

Zion, a Hebrew word interpreted by early Mormons to mean a place of safety or refuge, was given to the canyon by Mormon pioneers in the 1860s.

Human History

Evidence of at least 8,000 years of human occupation by Archaic, Ancestral Puebloans (known by archeologists as the Virgin Branch of the Kayenta Anasazi and Parowan Fremont), Southern Paiutes, and Mormon settlers who arrived in the 1860s.

Natural Resources

Geographic Features

Size: 148,732 acres (232 square miles)

- Designated Wilderness: 124,380 acres (83.6%)
- Inholdings: 3,430 acres

Elevation: Highest 8,726 ft (2660 m) — Horse Ranch Mountain; Lowest 3,666 ft (1128 m) — Coalpits Wash

Rivers and Major Streams: 97 miles

Intermittent Streams: 458 miles

North Fork of the Virgin River

River length in park: 17.95 miles

Average gradient of the Virgin River through the park: ~71 feet per mile

-Chamberlain Ranch to Temple of Sinawava = 87 feet/mile

-Temple of Sinawava to South Campground = 55 feet/mile

Sediment transfer: One million tons per year (average; extremely variable year-to-year)

- **The Narrows**

A two mile section of the North Fork of the Virgin River above the Temple of Sinawava that in places is only 20-30 feet across with 2000+ foot canyon walls on each side.

- **Zion Canyon**

A 6.5 mile section of the North Fork of the Virgin River that has carved out a major canyon from the Temple of Sinawava to Springdale.

Depth: ~2200 feet (main canyon to top of cliff) to 3800 feet (VC to West Temple)

Width: 0.2 mile to ~1 mile

Climate and Weather: Zion Canyon

- Maximum Precipitation: 31.65" (2005), Minimum Precipitation: 5.01" (2002)
- Temperature Extremes: Highest: 115°F (July 1, 1950), Lowest: -15°F (January 21, 1937)

Month	Normal Low Temperatures (°F)	Normal High Temperatures (°F)	Normal Mean Temperatures (°F)	Daily Highs over 100° F	Daily Lows below 32° F	Normal Precipitation (in)*
January	30.3	54.2	42.3	0	20.2	1.82"
February	33.5	58.3	45.9	0	12.8	1.98"
March	38.3	66.2	52.3	0	9.0	2.04"
April	43.9	74.3	59.1	0	3.0	1.31"
May	52.7	85.2	68.9	0.4	0.3	.67"
June	62.0	95.7	78.8	6.4	0	.31"
July	69.0	101.0	85.0	16.0	0	1.22"
August	67.7	98.3	83.0	9.9	0	1.45"
September	60.3	91.0	75.6	1.7	0	1.04"
October	48.8	78.3	63.6	0	1.4	1.30"
November	37.0	63.5	50.3	0	9.5	1.42"
December	29.5	53.3	41.4	0	18.0	1.63"
Annual	47.7	76.3	62.0	34.3	74.3	16.19"

*Precipitation data from the Utah Climate Center. "Normal" period 1981-2010. Additional data provided by Dave Sharrow, park hydrologist.

Flora (2014/2015 data)

Diversity of Vascular Plants:

- 1086 taxa (including subspecies and variations)
 - >1020 full plant species
 - 44 species endemic to Zion
 - 28% of known Utah flora (3,660 species), 60% of flora of Colorado Plateau Ecoregion
- Exotic species: ~143 taxa; 10 of these species classified as noxious weeds by Utah
- Federally listed as threatened or endangered: 1 species
- BLM or Forest Service Sensitive: 9 species; Species of concern: 52 species

Fauna (certified as present 2015)

- 68 species mammals
- 208 species birds
- 29 species of reptiles
- 7 species of amphibians
- 9 species of fish

Threatened or Endangered Species:

- Mexican Spotted Owl (Fed. Threatened)
- Southwestern Willow Flycatcher (Fed. Endang.)
- California Condor (Fed. Endangered)
- Desert Tortoise (Fed. Threatened)
- Yellow-billed Cuckoo (Fed. Threatened)

Species of Special Concern/Rare Species:

- Zion Snail (endemic)
- Virgin River Spinedace, Flannelmouth Sucker, Northern Goshawk (Conservation Agreement species)
- Several other species of state or park concern

Cultural Resources

- Archeological: 522 sites (22% of park surveyed to date-2015)
 - 36 of these sites occur within the Parunuweap Archeological District, listed in the National Register of Historic Places
- National Register of Historic Places (Historic/prehistoric): 94 sites
 - Includes 2 prehistoric archeological sites and 92 historic structures/buildings.
- Selected detail of historic structures/buildings:
 - 2 Roads (including related road features—bridges, retaining walls, culverts, parking areas, tunnels)
 - 8 Hiking Trails
 - 15 Cabins
 - 4 Irrigation Ditches
 - 3 Comfort Stations
 - 12 Residences and 6 Garages
 - 11 Office and Utility Buildings
 - 3 Dormitories
 - 28 other structures and buildings
 - Many of these buildings occur within 3 documented Historic Districts
- Cultural Landscapes: 2

Zion/Mt. Carmel Tunnel

- Constructed: 1927 – 1930
- Cost: \$1,896,000. (includes cost of highway)
- Length: 5613 feet (1.06 miles) Width: 22 feet Height: 16 feet

Museum Collection (2015)

Fields	Archeology	Ethnology	History	Archives	Art	Biology	Paleo	Geology	Total
# of Objects	27,511	108	5,978	303,881	101	24,268	579	246	362,690

Visitor Services (2015)

Visitation: 3,662,220 *up 14% from 2014* (2014: 3,211,596; 2013: 2,829,287)

Average # visitors per day during the peak months — July: 15,529; August: 14,753

(2010-2013 average daily visitors during peak months— July: 12,363; August: 11,373)

Between mid-1980 and 2000, annual visitation increased from 1.5 million visitors to over 2.5 million.

Visitor Protection (2015)

Search and Rescue Incidents:	105 (2014: 81; 2013: 76)
Emergency Medical Services:	385 (2014: 276; 2013: 250)
Law Enforcement Incidents:	2,816 (2014: 3,292; 2013: 2,100)
Service Calls:	1,570 (2014: 614; 2013: 499)
Structural Fire Callouts:	53 (2014: 30)
Mutual Aid:	143
Total incidents:	4,613 (2014: 4,293)

Flood-Related Fatalities: 18 total in park history. 2015: 7; 2014: 1; 2010: 2; 2001: 1; 1998: 2; 1961: 5

Frontcountry Facilities and Development

- Watchman Campground: 164 sites [95 electric (2 accessible), 69 tent (including 13 accessible sites), and 18 walk-in sites]; 7 group sites (Reservations from March- November; open year-round)
- South Campground: 117 sites (3 accessible) + 4 group sites (no reservations; closed for a few months during winter season)
- Lava Point Campground: 6 sites (primitive, no reservations)
- Picnic Areas: 4 (Grotto, Kolob Canyons, Zion Nature Center, Zion Canyon Visitor Center)
- Hiking trails: 89.4 miles
- Roads: 36.6 miles (34.2 miles paved and 2.4 miles unpaved)

Backcountry Use (2015)

- Backcountry Campsites: 42 designated sites
- Total Permits Issued: 17,955 permits / 61,593 people (2014: 14,527 / 50,880; 2013: 12,466 permits)
- Overnight Backpacking: 7,210 permits / 19,811 people (2014: 5,482 permits / 15,601 people)
- Canyoneering (Day): 10,585 permits / 41,451 people (2014: 8,920 permits / 35,018 people)
- Climbing Bivouac: 160 permits / 331 people (2014: 124 permits / 259 people)
- Whitewater Boating Permits: 0 (2014: 1 permit / 2 people)

Environmental Management System (EMS) and Sustainability (2015)

- Renewable energy generated on-site powers roughly 12% of park energy needs
- The amount of power used by the park has been reduced by 40% from 2003 levels
- Greenhouse gas emissions reduced by 34% from 2008 levels
- Zion diverted 178,000 pounds of materials to be recycled, rather than sent to a landfill

Zion Natural History Association (ZNHA)

ZNHA operates the bookstore with Zion, Cedar Breaks, and Pipe Spring under a Cooperating Association agreement. It is a non-profit organization that supports education, research and other programs for the benefit of the parks by donating a portion of all profits back to the park. ZNHA funds the park's popular Junior Ranger Program, its Youth Education Initiative, the printing of the free park newspaper, several intern positions, etc. Over the past 30 years, ZNHA has provided more than \$12 million in aid to the park. The Zion Canyon Field Institute (ZCFI) offers year-round fee-based educational courses for those who wish to immerse themselves more deeply into Zion's history, geology, flora, fauna, and cultural heritage.

Zion National Park Foundation (ZNPF)

ZNPF is the fundraising arm of Zion Natural History Association and the official fundraising partner of Zion National Park. Among other things, ZNPF raises money for the park's Youth Initiative, which makes much of the park's outreach and curriculum-based education programs possible.

Service Contractors

Zion Transportation Shuttle System

In May 2000, Zion implemented a mandatory shuttle bus system for park visitors along the six-mile Zion Canyon Scenic Drive. The system also provides service in the town of Springdale. The shuttles operate full-time mid-March through the last weekend in October (dates vary), with service on weekends in November along the Zion Canyon Scenic Drive. There are currently 32 propane-powered buses, 21 with accompanying trailers, that may be in service on any given day. The Springdale Loop consists of seven stops made by a single shuttle and the Zion Loop consists of nine stops made by a shuttle with a trailer.

Ridership: 5,297,880 riders in 2015 (up 31% from 2014's 4,031,441). Busiest days of the year—2015: Memorial Day Weekend (Sunday): 42,254 and Labor Day Weekend (Sunday): 40,394
Ranger-led Shuttle Tours (Ride with a Ranger): 7,072 visitors reached during 273 programs

Concession Operators

Xanterra Parks and Resorts, Inc.

Zion Lodge (motel units, historic cabins, restaurant, snack bar, gift shop) — open year-round

Canyon Trail Rides, Inc.: Guided horse trips in Zion Canyon (March-October)

Commercial Use Authorizations (CUA) and Special Park Uses (SPU)

The CUA program includes: commercial interpretive services (guided hiking), bicycle tours, motorcycle tours, photography and painting workshops, and trailhead shuttles. In 2015, Zion issued 122 CUAs to 94 companies.

SPUs are special events or activities that provide a benefit to an individual or group, rather than all visitors, and that require a written authorization and management control from the NPS. Zion issued 109 total SUP permits in 2015 for weddings, filming, 1st Amendment activities, church services and more.