

# **Facts and Figures: Zion National Park Profile 2018**

## **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 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, and biological resources while providing safe, sustainable, and cost-efficient access for visitors' experiences 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 interest..." 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**

Zion National Park contains 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% of total area)

- Inholdings: 3,430 acres

**Elevation:**

Highest Point, Horse Ranch Mountain – 8,726 ft. /2660 m

Lowest Point, Coalpits Wash – 3,666 ft. /1128 m

**Rivers and Major Streams:** 97 miles

**Intermittent Streams:** 458 miles

**North Fork of the Virgin River**

Length in park: 17.95 miles

Average gradient of the Virgin River through the park: ~71 feet/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 is 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**

The North Fork of the Virgin River has carved out a 6.5 mile canyon from the Temple of Sinawava to the town of Springdale UT.

- Depth: ~2200 ft. (main canyon to top of cliff) to 3800 ft. (VC to West Temple)
- Width: 0.2 miles to ~1 mile

**Climate and Weather: Zion Canyon**

Year of Maximum Precipitation: 2005 (31.65")

Year of Minimum Precipitation: 2002 (5.01")

Highest Recorded Temp: July 1, 1950 (115° F)

Lowest Recorded Temp: Jan. 21, 1937 (-15° F)

Month	Normal Low Temp (°F)	Normal High Temp (°F)	Normal Mean Temp (°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	0.67"
June	62.0	95.7	78.8	6.4	0	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	45.7	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

1086 Taxa (including subspecies and variations)

- >1020 plant species, 44 species of endemic to Zion
- 28% of known Utah flora (3,660 species), 60% of flora of Colorado Plateau Ecoregion

Exotic Species: 43 taxa; 10 species classified as noxious weeds by Utah

Federally listed as threatened or endangered: 1 species; Shivwits Milkvetch

BLM or Forest Service Sensitive: 9 species      Species of Concern: 52

## Fauna (2017)

70 mammal species, 258 bird species, 28 reptile species, 7 amphibian species, 4 fish species

### *Species of Special Concern/Rare Species:*

Zion Snail (endemic), Virgin River spinedace, Flannelmouth sucker, Desert sucker, Arizona toad, Common chuckwalla, Gila monster, Western banded gecko, Bald eagle, Black swift, Ferruginous hawk, Lewis's woodpecker, Mountain plover, Northern goshawk, Short-eared owl, Big Free-tailed bat, Fringed myotis bat, Townsend's big-eared bat

### *Threatened or Endangered Species:*

Mexican Spotted owl, Southwestern Willow flycatcher, California Condor, Mojave Desert tortoise, Yellow-billed Cuckoo

### *Non-Native Fauna:*

3 species of birds, 5 species of fish, 2 species of mammal

### *Special Projects:*

Desert Bighorn Sheep

This is a joint project with Zion NP, Zion Forever Project, Utah DWR, Utah Foundation for North American Wild Sheep, to relocate healthy sheep from Zion to herds with struggling populations and to collect detailed information about herd movements within Zion.

Peregrine Falcon

Zion National Park provides critical sanctuary for Peregrine Falcon nesting. This on-going program monitors nesting activity beginning in March until chicks fledge, usually in late July.

## **Frontcountry Facilities and Development**

**Watchman Campground:** 164 sites (95 electric, 69 tent, 18 walk-in, 15 accessible), 7 group sites, reservations from March-November (available up to 6 months in advance), open year-round

**South Campground:** 117 sites (3 accessible), 4 group sites, first-come-first-serve in 2017, reservations in 2018 from March-November (available 14 days in advance), closed December-February

**Lava Point Campground:** 6 sites (primitive), no reservations, closed in winter based on road conditions

4 Picnic Areas (Grotto, Kolob Canyons, Zion Nature Center, Zion Canyon Visitor Center)

89.4 miles of hiking trails

36.6 miles of roads (2.4 miles are unpaved)

### **Zion/Mt. Carmel Tunnel:**

Constructed 1927-1930, cost: \$1,896,000, length: 5613 feet (1.06 miles), width: 22 feet, height: 16 feet

## **Cultural Resources**

### **Archaeological:**

- 527 sites

### **National Register of Historic Places:**

- 94 sites

## **Visitor Services** (2017)

**Visitation:** 4,526,723, up 5% from 2016 (2016: 4,317,028; 2015: 3,662,220)

Average # of visitors per day during the peak months: June - 17,835; July - 18,651; August - 17,146

2017 was the first year that visitation hit over 500,000 for six consecutive months (April - September).

2016 only saw two months with more than 500,000 visitors.

2015's highest visitation month was July with 481,398 visitors.

2007-2013 annual visitation numbers stayed between 2.5 and 3 million visitors annually.

### **Visitor Protection** (fy2017)

Search and Rescue Incidents: 116

Emergency Medical Services Calls: 369

Law Enforcement Incidents: 2,326

Service Calls: 540

Structural Fire Callouts: 56

Mutual Aid Calls: 117

Fatalities: 4

### **Fire Management** (fy2017)

Wildland Fires: 3 fires burned 0.3 acres

Fuel Treatments (e.g. mechanical, prescribed fire, herbicide treatments): 12 projects for 511 acres

### **Zion Wilderness Use** (fy2017)

Wilderness Campsites: 42

Total Permits Issued: 17,738

Overnight Backpacking Permits (not including Narrows): 6,390

Canyoneering Permits All Forms (including Narrows): 9,698

Overnight Climbing Permits: 171

Overnight Canyoneering Trips (including Narrows): 1,402

Total People: 59,705

Total People: 16,460

Total People: 38,183

Total People: 336

Total People: 4,483

## **Interpretation and Education (fy2017)**

### **Programming:**

Ranger-led Programs and Drop-Ins:	1,224 programs / 51,653 visitors
Informal Ranger Rove:	768 roves / 18,911 visitors
Ranger-led Youth Programs and Drop-Ins:	19,369 adults / 9,525 children
Educational Outreach (onsite and offsite):	88 schools / 178 programs / 4,109 children
Informal Education Rove:	495 roves / 22,478
Children Stations:	19,369 adults / 9,525 children
Junior Ranger Program:	32,000 books / 17,000 badges

### **Contact Stations:**

Zion Canyon Visitor Center:	1,256,562 visitors (2016: 1,196,507 / 2015: 1,153,471)
Zion Human History Museum:	400,587 visitors (2016: 364,425 / 2015: 346,945)
Kolob Canyons Visitor Center:	172,588 visitors (2016: 161,475)
Zion Nature Center:	3,625 adults / 2,523 children (2016: 6,716 / 4,686)

### **Distance Learning:**

In 2017 Zion piloted the Distance Learning Program as part of its “Every Fourth Grader in the Park” program.

11 Programs, 9 Schools, 386 students and teachers reached.

During the spring of 2018 the program has taken off with nearly full bookings.

### **Concrete to Canyons:**

In 2017 Zion conducted the fifth season of Concrete to Canyons, a program designed to connect urban youth to public lands.

## **Volunteers-in-Parks (2017)**

533 volunteers contributed 29,238 hours of service. Campground Hosts and Interpretation Volunteers made up the majority of those hour at 14,572 and 7,788 hours respectively.

Additionally, 19 interns from the Intergovernmental Internship Cooperative worked in various capacities with the park. Though not volunteers, the VIP Coordinator works closely with the management of this program.

Four AIRs (Artists in Residence) were hosted in 2017. A photographer, two painters, and a musical compositionist each contributed 160 hours to the park (640 hours total).

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

The CUA program includes: commercial interpretive services (guided hiking), bicycle tours, motorcycle tours, photography and painter workshops, and trailhead shuttles. In 2017, Zion issued 140 CUAs (compared to 146 in 2016 and 121 in 2015).

SPUs are special events or activities that provide a benefit to an individual or group and that require a written authorization and management control from the NPS. Zion issued 116 special use permits in 2017 for weddings, filming, 1<sup>st</sup> Amendment activities, church services, and more (compared to 84 in 2016 and 109 in 2015).