



Zion Map & Guide

The official planner
of Zion National Park

Summer 2004



How To Use The Shuttle

Easy as 1-2-3

The Zion Canyon Scenic Drive is accessible by shuttle bus only. *Private vehicles are not allowed.* It's easy to visit this part of the park—follow these three steps:

1. Park

Parking at the visitor center is full between 10 a.m. and 3 p.m. daily. To avoid parking hassles, leave your car in the town of Springdale and ride the free town shuttle to the park. Enter the park on foot at the Zion Canyon Giant Screen Theater. Tune your radio to 1610 AM for more information.

2. Plan

Use the exhibits at the Zion Canyon Visitor Center to plan your visit based on your time (less than 3 hours or more than 3 hours) and your interests (sightseeing, hiking, and more). Check the schedule of Ranger-led activities and the park bookstore for maps and books to enhance your visit.

3. Ride

Free buses run from 5:45 a.m. to 11 p.m. as often as every six minutes. See page 12 for shuttle schedule. Buses are fully accessible. Pets are not allowed.

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Visitor Center Hours

April 1 - April 16, 2004

Zion Canyon	8 a.m. – 5 p.m.
History Museum	8 a.m. – 5 p.m.
Kolob Canyons	8 a.m. – 4:30 p.m.

April 17 – May 28

Zion Canyon	8 a.m. – 6 p.m.
• Permits	7 a.m. – 6 p.m.
History Museum	8 a.m. – 6 p.m.
Kolob Canyons	7 a.m. – 4:30 p.m.

May 29 – September 5

Zion Canyon	8 a.m. – 7 p.m.
• Permits	7 a.m. – 7 p.m.
History Museum	8 a.m. – 6 p.m.
Kolob Canyons	8 a.m. – 4:30 p.m.

September 6 – October 3

Zion Canyon	8 a.m. – 6 p.m.
• Permits	7 a.m. – 6 p.m.
History Museum	8 a.m. – 6 p.m.
Kolob Canyons	7 a.m. – 4:30 p.m.

October 4 – Spring 2005

Zion Canyon	8 a.m. – 5 p.m.
History Museum	9 a.m. – 5 p.m.
Kolob Canyons	8 a.m. – 4:30 p.m.

Emergencies

Call 911 or 772-3322 24 hours a day or contact a Park Ranger.

Making The Most of Your Time

Less Than 3 Hours

Zion Canyon Scenic Drive

The easiest way to see some of the park's most beautiful sights in a limited time is to ride the Zion Canyon Shuttle. Round trip will take a minimum of 90 minutes.

Weeping Rock Trail

An easy walk on a paved path where springs continually drip from overhead. .5 miles/.5 hours round trip/climbs 98 feet. Shuttle stop: Weeping Rock.

Court of the Patriarchs

Short but steep trail leads to views of the Sentinel and the Three Patriarchs. 100 yards/.25 hours round trip, climbs 40 feet. Shuttle stop: Court of the Patriarchs.

Zion-Mt. Carmel Highway

The 10-mile road that connects the east and south entrances is a steep drive up switchbacks and through the mile-long tunnel. This is the main access to Bryce Canyon and the North Rim of Grand Canyon. Large vehicle restrictions: page 12.

More Than 3 Hours

Emerald Pools Trail

One place where you'll often find at least a small waterfall. Easy, 1.2 miles/1 hour round trip, climbs 200 feet. Warning! Steep Cliffs. Shuttle stop: Zion Lodge.

Riverside Walk

Beautiful, shaded walk meanders through forested glens, following the path of the Virgin River into a high-walled canyon. Easy, 2 miles/1.5 hours round trip, climbs 57 feet. Shuttle stop: Temple of Sinawava.

Watchman Trail

Views of West Temple and lower Zion Canyon. Best hiked early or late in the day, often hot in summer. Moderate, 2.7 miles/2 hours round trip, climbs 368 feet. Trailhead: Zion Canyon Visitor Center.

Hidden Canyon Trail

Steep climb to the mouth of Hidden Canyon. Hikers may continue but there is no maintained trail. Strenuous, 2 miles/3 hours round trip, climbs 850 feet. Warning! Steep Cliffs. Not for anyone fearful of heights. Shuttle stop: Weeping Rock.

Angels Landing Trail

Steep trail climbs Walter's Wiggles past Scout Lookout, with spectacular views of Zion Canyon. Strenuous, 5 miles/4 hours round trip, climbs 1,488 feet. Warning! Steep Cliffs. Not for anyone fearful of heights. Shuttle stop: The Grotto.

Observation Point

High on the east rim, the trail ends on a slender peninsula overhanging the valley

floor offering spectacular views on three sides. Strenuous, 8 miles/5 hours round trip, climbs 2,148 feet. Warning! Steep Cliffs. Not for anyone fearful of heights. Shuttle stop: Weeping Rock.

Visitor Centers

Zion Canyon Visitor Center

At the south entrance. It is the main access for the Zion Canyon Shuttle. Exhibits help you plan your visit and make the most of your time. Rangers are available to answer questions and issue backcountry permits. Books, maps, and film available.

Kolob Canyons Visitor Center

Interstate 15 at Exit 40, 45 miles north of Springdale and 17 miles south of Cedar City. Rangers are available to answer questions and issue backcountry permits. Exhibits, books, maps, and film available.

Zion Human History Museum

First shuttle stop. Exhibits explain how humans have interacted with Zion. Orientation film, information desk, books, and film available.

Orientation Film

Twenty-two minute film highlights the park. Shown daily 8:30 a.m. to closing on the hour and half hour in the Zion Human History Museum.





National Park Service
U.S. Department of the Interior

Zion National Park

Superintendent Jock Whitworth

Mailing Address

Zion National Park
Springdale, Utah 84767

Web Site

www.nps.gov/zion

Park Headquarters

435 772-3256
Fax 435 772-3426
Backcountry Information 435 772-0170

E-mail

ZION_park_information@nps.gov

Lost and Found

May be reported at any visitor center.

Employment Information

with the National Park Service:
www.usajobs.opm.gov. Seasonal jobs are listed on www.sep.nps.gov.

This is Canyon Country

Steep Cliffs

Loose sand or pebbles on stone are very slippery. Be careful of cliff edges when using cameras or binoculars. Never throw or roll rocks; there may be hikers below.

- Stay on the trail.
- Stay back from cliff edges.
- Observe posted warnings.
- Parents-watch your children!



This symbol is a warning. Falls from cliffs on these trails have resulted in death.

Flash Floods

All narrow canyons are potentially hazardous. Flash floods, often from storms miles away, present a real danger and can be life threatening. By entering a narrow canyon, you are assuming a risk.

Judgment

Whether hiking, climbing, or driving, your safety depends on your own good judgment, adequate preparation, and constant



Flash floods occur without warning.

attention. Don't ruin your vacation by having an accident. Your safety is your responsibility.

Water

The desert is dry, even in winter. Carry enough water for everyone in your group. Water is available at visitor centers, campgrounds, and Zion Lodge. Do not drink untreated water.



This one took place in seconds. A hiker would not survive.

Information and Services

Emergencies

For 24-hour emergency response, call 772-3322 or 911. Zion Canyon Medical Clinic is in Springdale, reduced winter hours, 772-3226. The nearest hospitals are in St. George, Cedar City, and Kanab.

Accessibility

Restrooms, visitor centers, museum, and Zion Lodge are fully accessible. Several campsites are reserved for people with disabilities, and two trails are accessible.

Pets

Pets must be under physical control on a leash no longer than six feet at all times. They are not allowed in the backcountry, on trails, or in public buildings. Pets may be walked on the Pa'rus Trail. Boarding kennels are available in Rockville, Hurricane, Kanab, St. George, and Cedar City.

Entrance Fees

Private Vehicle \$20 per vehicle, good for 7 days in Zion National Park. \$10 per vehicle for Kolob Canyons section only.

Individual \$10 per person (pedestrian, bicycle, motorcycle, and organized group), good for 7 days in Zion National Park.

Zion Annual Pass \$40, good for one year from date of purchase at Zion National Park only.

Commercial Tours Ask for rates.

Golden Age Passport \$10 lifetime pass for U.S. residents 62 or older.

National Parks Pass \$50, good for one year from date of purchase in all areas of the National Park System.

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Golden Eagle Passport \$65, good for one year from date of purchase in all federal fee areas.

Golden Access Passport Free lifetime pass for U.S. citizens who are permanently disabled.

Camping

Watchman Campground Open all year, sites are first-come, first-serve November 1-March 28. Fees: \$16 a night, \$18 per night with electric hookups, \$20 per night for river sites (half price for holders of Golden Age/Access Passports). Reservations may be made for Watchman Campground five months in advance for April 2-October 31; on-line at reservations.nps.gov, or call 800 365-2267.

South Campground

Open mid-March through October, sites are first-come, first-serve. Fee: \$16 a night.

Group Campsites Available April 2 through October 31 by reservation to organized groups of 9-40 people for \$3.00 per person per night; 800 365-2267 or on-line at reservations.nps.gov.

Facilities Restrooms, drinking water, picnic tables, fire grates, dump stations, and utility sinks.

Other Campgrounds Private campground with showers and hookups are available outside the park.

Fires

Fires are permitted only in the fire pits provided at campgrounds and picnic areas. Bring or purchase firewood; collecting wood is not permitted. Fires are not permitted in the backcountry at any time.

Bicycling

• Avoid cars by riding the Pa'rus Trail. Watch for pedestrians and leashed pets.
• Park shuttles will not pass bicyclists, use turnouts to allow them to pass.
• Don't pass a moving bus, the driver may not be able to see you.
• Use caution passing a stopped bus.

- Ride single file.
- Children must stay with parents.
- Please wear your helmet.
- Automobile rules of the road apply to bicycles.
- Bicycles are not allowed off roadways.
- Shuttles have racks for two bicycles.

Backpacking

Permits are required for all backcountry camping—there is a fee. Maximum group size is 12 people. Permits and hiking information are available at visitor centers. See the *Zion Backcountry Planner* for more information.

Climbing

Climbing on Zion's sandstone requires appropriate hardware and technical skills. Climbing information is available at visitor centers. Some routes may be closed to climbing when Peregrine Falcons are nesting. A permit (fee) is required for overnight climbs.

Horseback Riding

Guided trips are available March through October, 435 679-8665. For private stock use contact a visitor center.

Watercraft

All watercraft use in the park requires a backcountry permit. Permits are issued when the river is flowing in excess of 140 cubic feet per second. Inner tubes are not permitted at any time on any watercourse in the park.

Food Service

Zion Lodge Dining room serves breakfast, lunch, and dinner. Dinner reservations are advised: 435 772-3213.

Other Food Service Restaurants available in Springdale, east entrance, Mt. Carmel Junction, and Kanab.

Groceries Grocery stores available in Springdale and Kanab. Convenience stores available in Mt. Carmel Junction.

Lodging

Zion Lodge Three miles north on Zion Canyon Scenic Drive. Open year-round. Rooms, cabins, and suites, and gift shop. Reservations recommended: 888 297-2757 or www.zionlodge.com.

Other Lodging Available in Springdale, Rockville, east entrance, Mt. Carmel Junction, Kanab, and Cedar City.

Worship Services

Offered during summer, check bulletin boards for times.

Interdenominational Zion Lodge and South Campground.

LDS Springdale.

Roman Catholic Zion Lodge.





Ranger-led Activities

Ranger-led activities are a great way to learn more about Zion National Park.

- Topics include:
- geology
 - plants
 - animals
 - human history
 - more

All programs are free. Check at visitor centers and Zion Lodge for program topics and hike locations. Allow time for shuttle transportation to the presentation.

Rangers may be called to fires and other emergencies—programs may be canceled.



Program	Dates	Times	Description
Morning Hike	May 2-Oct. 2	9 a.m. daily	One to three-hour hike. Be prepared to walk two to three miles. Wear sturdy footwear and bring a hat, sunglasses, sunscreen, and water. Check bulletin boards for meeting places. Some hikes may be accessible.
Ride With A Ranger Shuttle Tour	April 25-Oct. 2	9 a.m. daily	Two-hour narrated shuttle bus tour on the Zion Canyon Scenic Drive. Seating is limited—obtain free tickets at the Zion Canyon Visitor Center. Tickets are not required for the regular shuttle system.
Museum Talk	April 25-Oct. 2	11:25 a.m. daily 2:25 p.m. daily	20 to 30-minute talk on the shaded Zion Human History Museum patio.
Zion Lodge Evening Program	May 2-Sept. 11	9 p.m. nightly	30 to 45-minute presentation in the Zion Lodge Auditorium.
Watchman Campground Evening Program	April 25-May 15	9 p.m. nightly	30 to 45-minute presentation at the Watchman and South Campground Amphitheaters.
	May 16-Aug. 7	9:30 p.m. Mon. Wed. Fri. Sat. nights	
	Aug. 8-Sept. 11	9 p.m. Mon. Wed. Fri. Sat. nights	
	Sept. 12-Oct 2	8:30 p.m. nightly	
South Campground Evening Program	May 16-Aug. 7	9:30 p.m. Sun. Tue. Thur. nights	
	Aug. 8-Sept. 11	9 p.m. Sun. Tue. Thur. nights	

Entrance Fees at Work

About 80% of your entrance fees now stay in the park. The Fee Demonstration Program and other recent legislation has enabled Zion to continue to enhance your visit and protect park resources. Entrance fees are being used to establish and operate the new shuttle system. In addition, user fees make the following projects possible:

- Rehabilitate Weeping Rock and Emerald Pools Trails
 - Re-roof Zion Museum
 - Replace Oak Creek sewer
 - Rehabilitate Watchman Campground
 - Repair historic CCC retaining walls
- Your entrance fees make these and other projects possible. Thank you.



Zion Human History Museum exhibit installation, spring 2002.

Junior Ranger Program

Junior Ranger Explorer

Who

This summer discovery program is developed especially for children 6 to 12 years of age. *The 6-year-old minimum age is strictly followed.* For children under 6, see "Self-Guided Programs."

What

Junior Ranger Explorers learn about Zion National Park and their world through hands-on activities, games, hikes, and lessons. Topics vary and range from plants and animals to geology and archeology. Plus, children can earn awards: a pin and certificate for attending one session, and a patch for attending a second session or a ranger-led program (guided shuttle tour, walk, talk, evening program).

When

Available May 29 to September 4, 2004. Two sessions are offered daily: 9:00 to 11:30 a.m. and 1:30 to 4:00 p.m.

Where

The programs are held at the Zion Nature Center, 1/2 mile north of the south park entrance, near the entrance to the South Campground. The shuttle does not stop at the Nature Center. You may drive your vehicle to the Nature Center any time of the year. For accessibility information call 435 772-0169.

What to Wear

Many activities are outdoors, so dress comfortably and wear closed-toe shoes; *no sandals.* Hats and sunscreen are good on hot, sunny days. Bring rain gear if the weather looks stormy.

Registration

A parent or guardian must register children. Register at 8:30 for the 9:00 a.m. session, and at 1:00 for the 1:30 p.m. session. There is a one-time, \$2.00 per child fee.

Parents

Children must be with their parents between sessions if attending both morning and afternoon programs. Please be prompt dropping off and picking up children. Food is not available, so ensure children have eaten before coming to the program.

Self-Guided Programs

Ages 6 to 12 Junior Ranger

Children 6 to 12 years old can earn a badge by completing an activity booklet during their visit. Booklets are available at the visitor centers and museum year-round. A different Junior Ranger Badge is offered at each visitor center.

Ages Under 6 Junior Ranger Helper

Children under 6 years old can earn a decal by completing an activity sheet available at the Zion Canyon Visitor Center and Human History Museum year-round.

The Zion Natural History Association provides additional funding for this program.



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Hiking & Canyoneering Emerald Pools Trails

HIKING IN CANYONS, EVEN SHORT HIKES, REQUIRES ADVANCE PLANNING. MANY HIKES INVOLVE walking in water, and the rivers and creeks are subject to flash flooding. River flows vary greatly depending on time of year and weather conditions. Check the National Weather Service weather forecast and flash flood potential before entering any canyon; posted daily in visitor centers. See the *Zion Backcountry Planner* for additional information.

Permits

Permits are required for all overnights, through hikes of the Narrows and tributaries, Left Fork of North Creek (the Subway), Kolob Creek, and all canyons requiring the use of technical equipment. Permits are issued at visitor centers (see hours, page 1) the day before your hike. Cost: • \$10 for 1-2 people • \$15 for 3-7 people • \$20 for 8-12 people. Reservations are available on-line for many permits: www.nps.gov/zion.

Group Size

The maximum group size is 12 people of the same affiliation on the same trail or in the same drainage on the same day.

Be Prepared

All narrow canyons are potentially hazardous. Flash floods, cold water, and strong currents present real dangers that can be life-threatening. Your safety depends on your own good judgement, adequate preparation, and constant attention. *By entering a narrow canyon, you are assuming a risk. Your safety is your responsibility.*

Zion Narrows

Weather and water conditions permitting, there are three ways to hike the Zion Narrows:

Short Day-hike Continue upstream beyond the end of the Riverside Walk. 1 to 5 hours, round trip. No permit required.

Through Day-hike Hike downstream from Chamberlain's Ranch. This long all-day hike requires a shuttle to the trailhead and a permit.

Overnight Hike Hike downstream from Chamberlain's Ranch. This two-day hike requires a shuttle to the trailhead and a permit. Maximum stay is one night. Fires are not allowed.

Zion Narrows Checklist

- Obtain *weather and flash flood potential forecasts* before starting your trip.
- Wear *sturdy boots* or shoes with ankle support.
- Take a *walking stick*. Do not cut tree branches for sticks.
- Small children *should not hike in the river* due to strong currents and deep pools.
- Carry out all trash: food wrappers, apple cores, fruit peels, tissue paper—everything you carried in.
- Carry one gallon of *drinking water* per person for a full-day hike, food, sunglasses, sunscreen, and first aid kit.
- Take a *sweater or windbreaker*. The Narrows is much cooler than Zion Canyon.
- Pack gear in *waterproof bags*.
- Use the *restroom* at the Riverside Walk Trailhead before hiking. There are no toilets in The Narrows.

THIS SERIES OF POOLS AND WATERFALLS MAY BE ACCESSED BY THREE DIFFERENT ROUTES. THESE trails, as well as a short trail to the upper pool, connect and can be combined as a loop. There is always a small waterfall at the lower pool. If it rains there may be larger waterfalls at both the upper and lower pools.

Lower Emerald Pool Trail

Easy, .6 mile one-way, 69-foot ascent. Paved trail to the pool, then continues behind the waterfalls that cascade from the middle pools into the lower pool.

Middle Emerald Pools Trail

Moderate, 1 mile one-way, 150-foot ascent. Unpaved climb to a sandstone ledge that parallels the lower trail but at a higher level. Connects to lower pool trail to form a 1.6-mile loop. Do not go near the edge. Deaths have occurred from falling from the middle pools. Loose sand and pebbles on stone are very slippery.

Upper Emerald Pool Trail

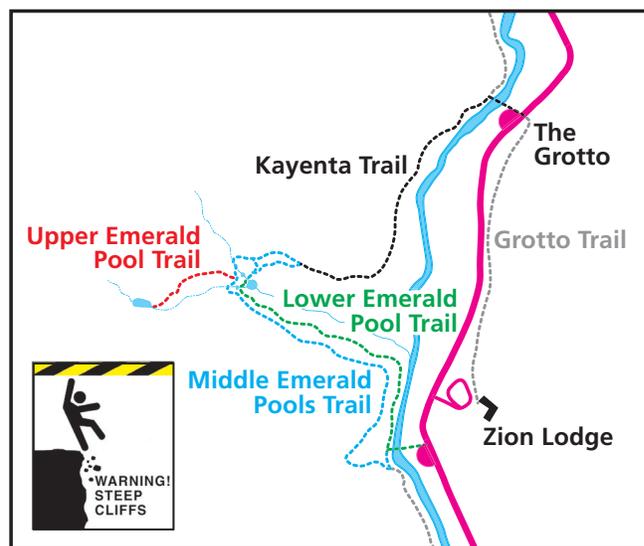
Moderate, 3 mile from Middle Pool Trail one-way, 200-foot ascent. A sandy, rocky trail climbs to the base of the cliff.

Kayenta Trail

Moderate, 1 mile one-way, 150-foot ascent. Unpaved climb to a sandstone ledge, connects The Grotto to the Emerald Pools.

Grotto Trail

Easy, .5 mile one-way, level. Trail connects Zion Lodge to The Grotto Picnic Area. Can be linked with Emerald Pools and Kayenta Trails allowing a 3-mile loop hike.



Mountain Lions

MOUNTAIN LIONS ARE WILD ANIMALS AND CAN BE DANGEROUS. THEY HAVE BEEN OBSERVED frequently in the park. An attack by one is unlikely—there is a far greater risk of being struck by lightning. Zion National Park has never had a reported attack on people or pets. However, mountain lions have attacked in other areas.

Recommendations For Your Safety

- Watch children closely, and never let them run ahead or lag behind.
- Solo hiking or jogging is not recommended.
- Never approach a mountain lion. Most will try to avoid a confrontation. Always give them a way to escape.
- Do not run! Try to look large. Put your arms up.

- If a mountain lion approaches, wave your arms, shout, and throw rocks or sticks at it.
- If attacked, fight back.
- Report any mountain lion sightings or encounters to a Park Ranger as soon as possible.



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Maintaining Sanctuary



Zion National Park is much more than just a recreational destination. It is a sanctuary of natural and cultural resources—a living museum for all the world. Conserving this heritage is a task the National Park Service cannot accomplish alone. All of us serve a critical role in maintaining Zion's sanctuary for the future.



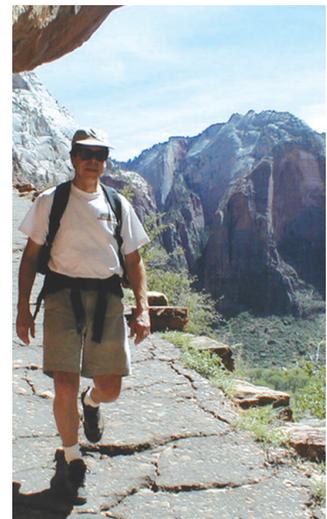
Please stay on marked trails. Hiking off trails can lead to loss of vegetation, soil compaction, erosion, and unsightly scars on the landscape.



“You better behave, because I won’t”
Keep wildlife wild. Human foods are not healthy for wildlife. Feeding wild animals is illegal and can cause injury or death to the animal. Wild animals are capable of hurting you as well.



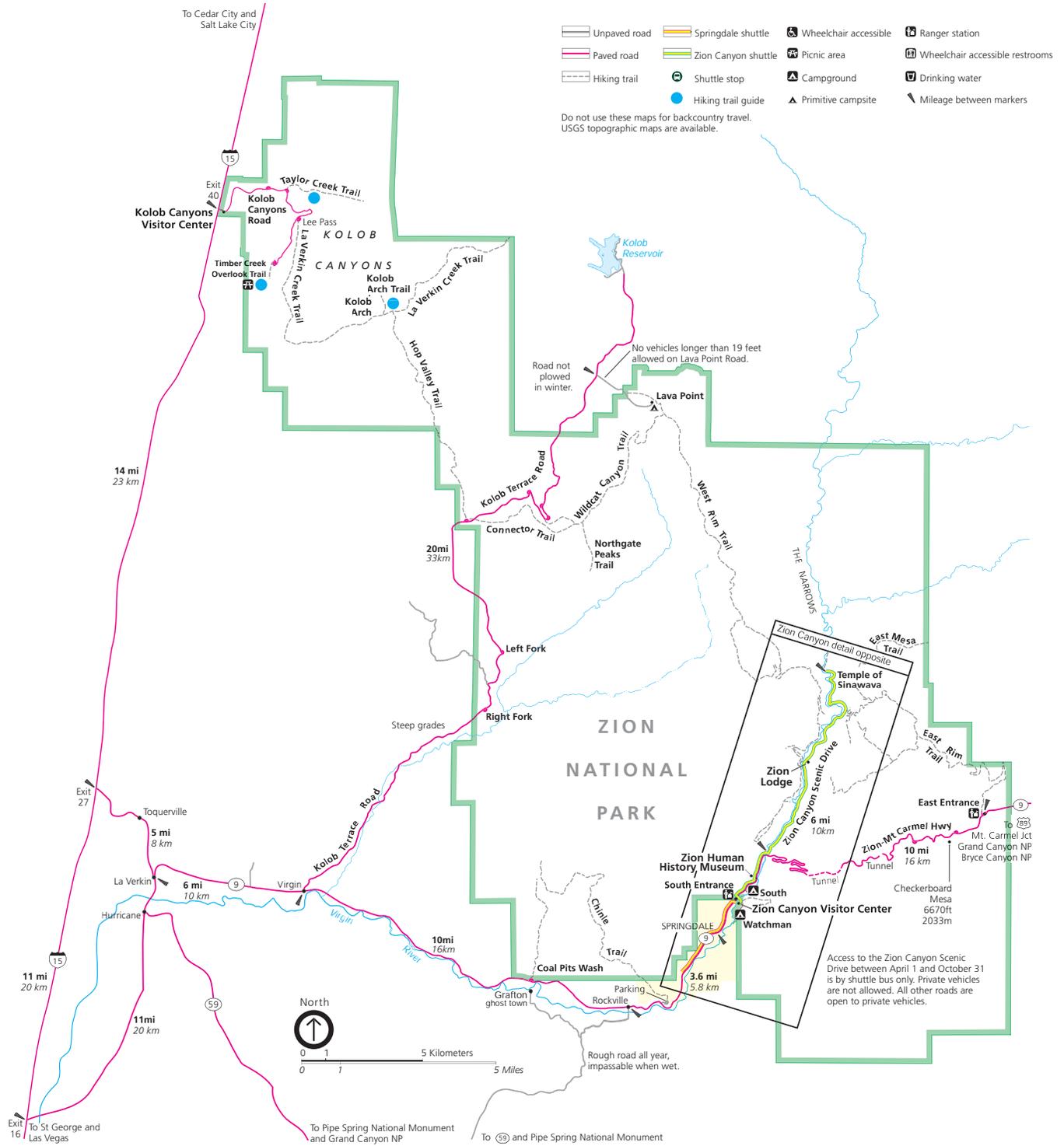
Please respect the peace and quiet of the park and protect the subtle sounds of nature by traveling quietly.



You are an important resource too. Use common sense and good judgement to protect your own safety and take advantage of our educational programs to enhance your knowledge of Zion.

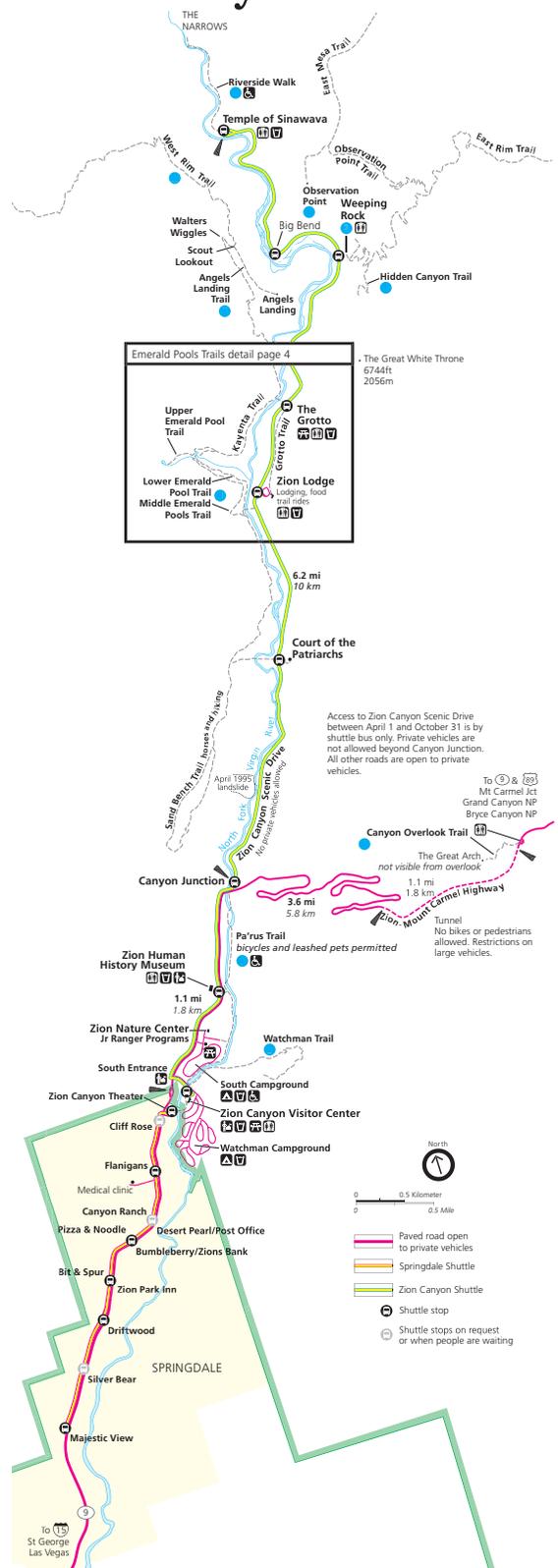


Zion National Park





Zion Canyon



Trail Guide

Use the Shuttle to Access Trailheads

Access to trailheads along the Zion Canyon Scenic Drive is by shuttle only. *Private vehicles are not allowed.* Shuttles depart early morning from Springdale and the Zion Canyon Visitor Center and run late into the evening. Check page 12 for schedule. Plan your hike so you do not miss the shuttle.

For Your Safety

Stay on established trails and watch your footing, especially at overlooks and near drop-offs. Always stay back from edges. Watch children closely. People uncertain about heights should turn around if they become uncomfortable. Never throw or roll rocks; there may be hikers below.

Trail Shuttle Stop	Round Trip (mi/km) (avg. time)	Ascent (ft/m)	Description
Zion Canyon			
Pa'rus Trail Zion Canyon Visitor Center	3.5/5.6 1-1/2 hrs.	50/15	Easy Paved trail follows Virgin River from South Campground to Canyon Junction.
Weeping Rock Weeping Rock	0.5/0.8 1/2 hour	98/30	Short but steep Minor drop-offs. Paved trail ends at a rock alcove with dripping springs. Trailside exhibits.
Riverside Walk Temple of Sinawava	2.0/3.3 1-1/2 hrs.	57/17	Easy Minor drop-offs. Paved trail follows Virgin River along bottom of narrow canyon. Trailside exhibits.
Lower Emerald Pool Zion Lodge	1.2/1.9 1 hour	69/21	Easy Minor drop-offs. Paved trail to lower pool and waterfalls.
Middle Emerald Pools Zion Lodge	2.0/3.3 2 hours	150/46	Moderate Long drop-offs. Loop trail to lower and middle pools.
Canyon Overlook Zion-Mt. Carmel Highway-east of long tunnel	1.0/1.6 1 hour	163/50	Moderate Long drop-offs, mostly fenced. Rocky, uneven trail ends at spectacular viewpoint of lower Zion Canyon and Pine Creek Canyon.
Watchman Zion Canyon Visitor Center	2.7/3.3 2 hours	368/112	Moderate Minor drop-offs. Ends at viewpoint of lower Zion Canyon, Oak Creek Canyon, and town of Springdale.
Hidden Canyon Weeping Rock	2.0/3.2 3 hours	850/259	Strenuous Long drop-offs. Not for anyone fearful of heights. Ends at mouth of narrow canyon.
Angels Landing The Grotto	5.0/8.6 4 hours	1488/453	Strenuous Long drop-offs and narrow trail. Not for anyone fearful of heights. Ends at summit high above Zion Canyon. Last 0.5 mi (0.8 km) follows steep, narrow ridge; chains have been added.
Observation Point Weeping Rock	8.0/12.0 5 hours	2148/655	Strenuous Climbs through Echo Canyon to Observation Point. Excellent views of Zion Canyon. Trail gives access to other East Rim plateau trails: Cable Mountain and Deertrap Mountain.
West Rim to Cabin Spring The Grotto	10/17.2 8 hours	2640/880	Strenuous Long drop-offs. Climbs to high country view of canyons. Trail continues to Lava Point. Trip to Lava Point should not be attempted as a one-day hike.
Kolob Canyons			
Timber Creek Overlook Kolob Canyons picnic area	1.0/1.6 1/2 hour	100/30	Moderate Follows ridge top to small peak with views of Timber Creek, Kolob Terrace and Pine Valley Mountains.
Taylor Creek Zion Canyon Visitor Center	5.0/8.6 4 hours	450/137	Moderate No drop-offs. Follows Middle Fork of Taylor Creek past two homestead cabins to Double Arch Alcove.
Kolob Arch Lee Pass	14/22 8 hours	699/213	Strenuous No drop-offs. Follows Timber and LaVerkin Creeks and ends at Kolob Arch, possibly world's largest freestanding arch.





The Geology of Zion

ZION NATIONAL PARK IS A SHOWCASE OF geology. The arid climate and sparse vegetation expose bare rock and reveal the park's geologic history.

Zion sits on the edge of the Colorado Plateau. Uplift, tilting, and erosion formed the Grand Staircase, a series of colorful cliffs stretching from Bryce Canyon to the Grand Canyon. The bottom layer of rock at Bryce Canyon is the top layer at Zion, and Zion's bottom layer is Grand Canyon's top layer.

Sedimentation

Zion was a relatively flat basin near sea level 275 million years ago. As sands, gravels, and muds eroded from surrounding mountains, streams carried these materials to the basin, depositing them in layers. The sheer weight of these accumulated layers caused the basin to sink, thus the top surface remained near sea level. As the land rose and fell and as the climate changed, the environment fluctuated from shallow seas to coastal plains to a desert of massive windblown sand. Sedimentation continued until 10,000 feet of material accumulated.

Lithification

Mineral-laden waters slowly filtered through the compacted sediments. Iron oxide, calcium carbonate, and silica acted as cementing agents. With pressure from overlying layers and long periods of time, the deposits transformed into stone. Ancient seabeds became limestone; mud and clay became mudstones and shale; and river sand and sand dunes became sandstone. Each layer originated from a distinct source and so differs in thickness, mineral content, color, and eroded appearance.

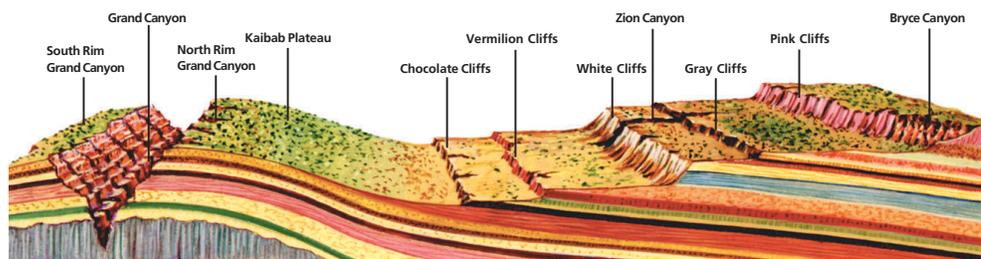
Uplift

In an area from Zion to the Rocky Mountains, forces deep within the earth pushed the surface up. Not chaotically, but a slow vertical hoisting. Zion rose from near sea level to 10,000 feet above sea level.

Uplift is still occurring. In 1992 a magnitude 5.8 earthquake caused a landslide visible just outside the park's south entrance.

Erosion

Uplift gave streams greater cutting force in their descent to the sea. Zion's location on the western edge of this uplift caused the streams to tumble off the plateau, flowing rapidly down a steep gradient. These streams eroded and cut into rock layers, forming deep narrow canyons. Grain by grain the Virgin River carried away over 6,000 feet of rock that once lay above Zion's highest layers visible today.



The Grand Staircase

The Virgin River is still excavating. Upstream from the Temple of Sinawava, the river cuts through Navajo Sandstone, creating a slot canyon. At the Temple, the river reached the softer Kayenta Formation below. Water erodes this shale, undermining the overlying sandstone and causing it to collapse, widening the canyon.

Volcanic Activity

Volcanic vents created, as a result of the weakening of the Earth's crust during uplift, allowed lava flows and cinder cones

to form. Cinder was piled several hundred feet high in classic cones and lava flowed into valleys like those visible west of Rockville and on Kolob Terrace.

Geology In Action

More than once landslides dammed the Virgin River forming lakes. Sediments settled from the quiet waters. Always the river breached the dam and drained the lakes, leaving behind a flat-bottomed valley. This change in the canyon's character can be seen from the scenic drive south of Zion

Lodge near the Sentinel Slide. This slide severely damaged the road in 1995.

Flash floods occur when sudden thunderstorms dump water on exposed rock. With little soil to absorb the rain, runoff occurs quickly. These floods often happen without warning and can increase water flow by over 100 times. In 1998, a flash flood increased the volume of the Virgin River from 200 cubic feet per second to 4,500 cubic feet per second, once again damaging the scenic drive at the Sentinel Slide.



The Colorado Plateau



Geology is not something that happened in the past. It continues changing Zion's landscape. Earthquakes, flash floods, and rock falls, like this one on Bridge

Mountain, are sudden reminders that the Earth is dynamic.

Pat Serma

Rock Layer	Appearance	Where To See	Deposition	Rock Type
Cinder cones and lava flows	black layers and cones	Kolob Terrace and west of Rockville	lava flows and cinder cones	basalt and cinders
Carmel Formation	cliffs	Mt. Carmel Junction	shallow sea and coastal desert	limestone, gypsum, sandstone
Temple Cap Formation	cliffs	top of West Temple	desert	sandstone
Navajo Sandstone	steep cliffs 1,600 to 2,200 feet thick	tall cliffs of Zion Canyon; highest exposures are West Temple, Checkerboard Mesa	desert sand dunes covered 150,000 square miles	cross-bedded sandstone
Kayenta Formation	red lower layers are colored by iron oxides	believed to be the tallest sandstone cliffs in the world	shifting winds during deposition created cross-bedding	
Kayenta Formation	rocky slopes	throughout canyon	streams	siltstone and sandstone
Moenave Formation	slopes and ledges	lower red cliffs seen from Zion Canyon Visitor Center	streams and ponds	siltstone and sandstone
Chinle Formation	purplish slopes	above Rockville	streams	shale, loose clay, conglomerate
Moenkopi Formation	chocolate cliffs with white bands	rocky slopes from Virgin to Rockville	shallow sea	shale, siltstone, mudstone, others
Kaibab Formation	cliffs	escarpment along I-15 near Kolob Canyons	shallow sea	limestone





Managing Fire



Fire plays a major role in shaping many of Zion's ecosystems.

THE NATIONAL PARK SERVICE USES MANY TOOLS TO MANAGE OUR natural and cultural resources. Fire is one such tool. By using a combination of techniques, we can best manage wildland fire to reduce the risk to the public and to maintain healthy ecosystems on federal lands.

Fire Suppression

Extinguishing or limiting wildland fires at their discovery by utilizing the safest and most efficient suppression methods available.

Prescribed Fire

Any fire ignited by management specialists under predetermined conditions to meet specific objectives related to hazardous fuels or habitat improvement. An approved prescribed fire plan must exist prior to ignition.



Public and firefighter safety is always the main priority in all of Zion's fire management operations.

Wildland Fire Use

The management of naturally ignited (lightning) wildland fires to accomplish specific pre-stated resource management objectives in predefined geographic areas outlined in Fire Management Plans.

Mechanical Fuel Reduction

The removal of natural vegetation with mechanized equipment and/or hand tools. Usually limbing and thinning vegetation and disposing of the material through pile burning.

Chemical Fuel Treatment

The use of herbicides to control unwanted vegetation. Follow-up treatments may include mechanical fuel reduction.

Profile

Established

1909 as Mukuntuweap National Monument; expanded in 1919 as Zion National Park. Kolob section added in 1937.

Significance

- Established to preserve and protect aesthetic and scientific values:
- Zion features stunning scenery found nowhere else on earth.
- Zion is a geologic showpiece with sandstone cliffs among the highest in the world.
- Zion features one of the last mostly free-flowing river systems on the Colorado Plateau.
- Zion features a large, diverse plant and animal community.
- Zion features evidence of human occupation both historic and prehistoric, including excellent examples of Civilian Conservation Corps work.

Size

229 square miles (147,551 acres).

Elevation

Lowest: 3,666 ft (1,128 m), Coalpits Wash in the southwest corner. Highest 8,726 ft (2,660 m), Horse Ranch Mountain.

Precipitation

Average: 15 inches.

Name

Zion, a Hebrew word referring to a place of safety or refuge, given to this canyon by Mormon pioneers in the 1860s. Kolob, in Mormon theology, is a heavenly place close to God.

Humans

Evidence of Ancestral Puebloans, known as the Anasazi, date from 2,000 years ago; Paiutes from about 800 years ago to present. Mormon settlers arrived in the 1860s. Park visitation in 1920 was 3,692; in 1996 it reached 2.5 million.

Plant Life

Richest diversity of plants in Utah—almost 800 native species. Differences in elevation, sunlight, water, and temperature create "microenvironments," like hanging gardens, side canyons, and isolated mesas that lend to this diversity.

Animal Life

75 species of mammals, 271 birds, 32 reptiles and amphibians, 8 fish. Commonly seen animals include mule deer, lizards, and many species of birds. Rare or endangered species include the Peregrine Falcon, Mexican Spotted Owl, Southwest Willow Flycatcher, desert tortoise, and the Zion snail, found nowhere else on earth.

Zion Canyon Shuttle

Includes 30 propane buses and 21 trailers. In 2002, there were 2.3 million riders. Each bus/trailer combination replaces 28 cars that would drive up the Scenic Drive.

Zion Map & Guide 9

Weather and Climate

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temperature (°F)												
normal daily max	52	57	63	73	83	93	100	97	91	78	63	53
normal daily min	29	31	36	43	52	60	68	66	60	49	37	30
extreme high	71	78	86	94	102	114	115	111	110	97	83	71
extreme low	-2	4	12	23	22	40	51	50	33	23	13	6
days above 90°F	0	0	0	1	8	21	30	28	18	3	0	0
days below 32°F	19	14	10	3	0	0	0	0	0	1	9	18
Precipitation (inches)												
normal	1.6	1.6	1.7	1.3	0.7	0.6	0.8	1.6	0.8	1.0	1.2	1.5
maximum	7.5	6.7	7.1	4.4	3.0	4.0	3.6	4.8	6.7	3.3	3.2	4.3
max 24 hour	1.6	1.3	0.9	1.2	1.8	2.2	1.1	1.6	1.4	1.3	1.3	2.0
max snowfall	26	18	14	3	T	0	0	0	T	1	5	21
days w/precip	7	7	8	6	5	3	5	6	4	4	5	6
thunderstorms	0	0	0	1	4	5	14	15	5	2	0	0

Be prepared for a wide range of weather conditions. Temperatures vary with changes in elevation and day/night temperatures may differ by over 30°F.

Spring

Weather is very unpredictable. Stormy, wet days are common, but warm, sunny weather may occur too. Precipitation peaks in March. Spring wildflowers bloom from April through June, peaking in May.

Summer

Days are hot (95-110°F), but overnight lows are usually comfortable (65-70°F). Afternoon thunderstorms are common from mid-July through mid-September. Storms may produce waterfalls as well as flash floods.

Fall

Days are usually clear and mild; nights are often cool. Autumn color displays begin in September in the high country. Colors in Zion Canyon usually peak in late October.

Winter

Winters in Zion Canyon are fairly mild. Winter storms bring rain or light snow to Zion Canyon, but heavier snow to the higher elevations. Clear days may become quite warm, reaching 60°F; nights are often in the 20s and 30s. Winter storms can last several days and cause roads to be icy. Zion roads are plowed, except the Kolob Terrace road, which is closed in winter. Be prepared for winter driving conditions from November through March.





Traveling In The Area

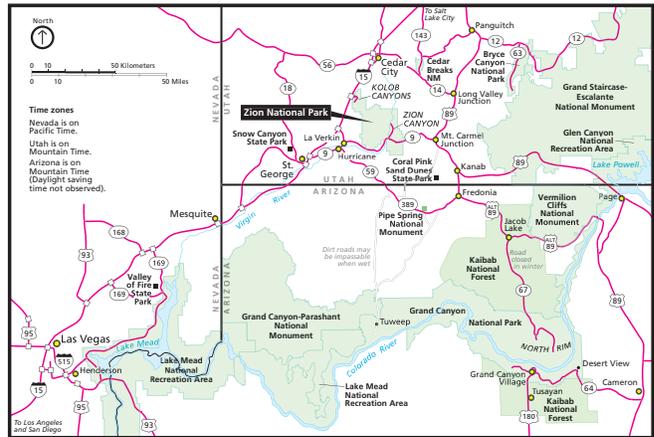
Zion National Park is part of the Southwest's "Grand Circle" of national parks, monuments, historic areas, and recreation areas— one of the world's great concentrations of outstanding natural and cultural features. Even though these areas seem close, do not try to visit too many in a short period. Allow plenty of time for each and plan return trips if you miss some this time around.

Utah's 13 National Park Service areas comprise a small part of the public land in the state. The Bureau of Land Management and U.S. Forest Service manage large areas including some strikingly beautiful and some very remote places. In addition, the state of Utah administers 44 state parks.

Travel Information

You can get more information on traveling in the area at the information desks in the park visitor centers. The nearby towns of Kanab, St. George, and Cedar City have offices for some or all of these other land management agencies. They also have travel councils and chambers of commerce.

Utah Travel Council 800 200-1160, www.utah.com
Utah State Parks and Recreation 801 538-7220, Reservations 800 322-3770 www.stateparks.utah.gov
National Park Service www.nps.gov
Bureau of Land Management 801 539-4001 www.blm.gov
U.S. Forest Service www.fs.fed.us
National Weather Service www.nws.noaa.gov
Utah Department of Transportation
Recorded road conditions and construction, dial 511



Area Mileages

One-way from Zion Canyon Visitor Center.

West Bound

St. George, UT 45
Las Vegas, NV 158
Death Valley, CA 284

South Bound

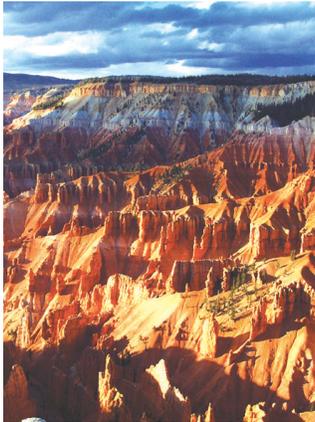
Grand Canyon North Rim 120
Grand Canyon South Rim 253
Flagstaff, AZ 243

East Bound

Kanab, UT 41
Page, AZ 125
Albuquerque, NM 500

North Bound

Bryce Canyon 86
Salt Lake City, UT 325
Moab, UT 333



Cedar Breaks National Monument

Seventy-five miles north of Zion lies Cedar Breaks. At a 10,350-foot (3,155m) elevation, the park features a spectacular wonderland—a brightly colored amphitheater filled with spires, fins, and hoodoos against a backdrop of subalpine greens and brilliant blue skies. In summer, the meadows are ablaze with colorful wildflowers. Cedar Breaks features a visitor center, daily ranger programs, trails, picnic area, campground, and scenic drive with views into the "breaks." Temperatures can be cool. The road is closed because of heavy snow, fall through spring. For more information call 435 586-9451. www.nps.gov/cebr



Pipe Spring National Monument

Pipe Spring National Monument is rich with American Indian, early explorer, and western pioneer history. In the 1870s, Mormon pioneers built a fort on the site, "Winsor Castle," laying claim to one of the few perennial springs on the Arizona Strip. The visitor center, tours of Winsor Castle, living history demonstrations, garden and orchard, and a half-mile trail offer a glimpse into Indian and pioneer life in the Old West. A bookstore operated by the Zion Natural History Association, and a campground operated by the Kaibab Paiute Tribe are nearby. For more information call 928 643-7105. www.nps.gov/pisp



Bryce Canyon National Park

Erosion has shaped a colorful amphitheater of "hoodoos," unique formations whimsically arranged and tinted with colors too numerous and subtle to name. We encourage you to use the Bryce Canyon Shuttle during your stay. It is easy and convenient and you'll be doing your part to reduce traffic, conserve fuel, reduce pollution, and protect park resources. Ample parking is available at Ruby's Inn. Reconstruction of the scenic drive will be completed in 2004. Be prepared for delays up to 20 minutes. For detailed shuttle and road construction information, tune your radio to 1610 AM as you approach the park. Camping reservations may be made on-line at www.ReserveUSA.com. For more information call 435 834-5322. www.nps.gov/bryca



National Park Shuttle Systems

The National Park Service has shuttle systems in place in several area parks that make visiting convenient and comfortable. The shuttles reduce parking congestion, noise, and pollution. Comments from the visiting public have been overwhelmingly positive. Take advantage of these shuttles—let us do the driving so you can enjoy the parks. Shuttles operate during the busy season in:

- Zion National Park
- Bryce Canyon National Park
- Grand Canyon National Park, South Rim

Check park web sites and publications, visitor centers, and as you approach the parks, listen to the AM radio stations, identified with highway signs, for more information. National Park Service website www.nps.gov.





Zion Canyon Field Institute

Zion National Park, Springdale, Utah 84767 435 772-3264 www.zionpark.org

Learn, Explore, Enjoy!

Join us for an exciting, intensive educational experience with the majesty of Zion National Park and its surroundings as your living classroom.

The Zion Canyon Field Institute (ZCFI) is a nonprofit educational organization created by the Zion Natural History Association in cooperation with Zion National Park. Its mission is to educate and inspire. Participants investigate the natural and cultural resources of the greater Zion ecosystem with visiting instructors in science, the humanities, and the arts. Learning is through adventurous, hands-on programs.

Workshops take place in Zion National Park, Cedar Breaks National Monument, Pipe Spring National Monument and nearby locales. They provide excellent opportunities to learn about and view local flora, fauna, and cultural sites up-close with engaging expert instructors. Enrollment is limited to ensure a quality experience.

The Field Institute operates year round. Course fees include books and materials and will allow ZCFI to expand its offerings. Fees range from \$25-\$80/day.

Field Institute Classes 2004

Spring Workshops

Rock Art Service/Learning April 19-20
Recycled Art Contest Deadline April 22
Zion Geology April 23
Earth Day Celebration April 24
Zion Through the Lens April 30-May 1

Reptiles of Zion May 7
Botanical Illustration May 14
Natural History of Mtn. Lions May 15
Spring Photography May 25

Summer Workshops

East is Eden June 2
Edible Plants June 5
Summer Photography June 8
Zion Narrows June 12
Bat Biology & Conservation June 30
Geology in the Transition July 8
Cedar Breaks: From Lab to Field July 9
Edible & Medicinal Plants at Cedar Breaks July 10
Zion By Moonlight July 30
Insects: Biology & Exploration Aug. 21
Angels Landing Aug. 25

Fall Workshops

Photography: Eastward Ho! Sept. 8
Natural History of Desert Snakes Sept. 11
Wildlife Survey Sept. 14-16
Field Journal Journey Sept. 17
Natural History of Elk Sept. 18
Autumn Photography Sept. 22
Pa'rus Picnic & Zion History Sept. 25
Zion Narrows Sept. 25
Painting In Zion Oct. 1
Natural History of Mule Deer Oct. 9
Descending the Grand Staircase: From Desert To Snow Oct. 9 or 10
Archeology Workshop Oct. 18-20
Fall Foliage Photography Oct. 21-23

Winter Workshops

Geology of Zion Nov. 5-6
Zion In Black & White Nov. 26
Winter In Zion Photo Journey Dec. 11

Service Projects

ZCFI offers opportunities for workshops that benefit participants and the parks. Service projects, like archaeological studies, river restoration, and a wildlife survey, allow participants to join professionals and help inventory seldom-visited sites within the park.

Custom Classes

We can design a custom course for your group. Even small family groups can participate in our individualized classes.

High School Field Trips

This 3-hour class is designed for students of all ages and provides an academic overview of the park and its resources. Students learn about area flora, fauna, geology, and cultural history in the field.

Registration

A registration packet is available on our website: www.zionpark.org, by calling 800 635-3959 or 435 772-3264, or at any bookstore in Zion National Park.



Zion Natural History Association

Springdale, Utah 84767 phone 435 772-3264 fax 435 772-3908 www.zionpark.org

The Zion Natural History Association is a nonprofit organization established in 1931 to support education, research, and other programs for Zion National Park, Cedar Breaks, and Pipe Spring National Monuments. Financial support by ZNHA members is pooled with sales from bookstores to provide approximately \$300,000 in aid annually. Members receive a 20% discount on Field Institute classes and purchases at ZNHA bookstores. Order by phone: 800 635-3959.

Zion Trip Planning Package

Includes the books: *Zion, Towers of Stone*; *Zion Shuttle Guide*; *Hiking Guide To Zion National Park*; *Introduction to the Geology of Zion National Park*; and a Zion topographic map. (\$29.30 value) **\$22.95**

Zion National Park Orientation Video/DVD

This is the official National Park Service orientation video shown daily in the Zion Human History Museum. Covers plants, animals, geology, history, and what to do and see with magnificent photography. 22 minutes, color, VHS **\$9.95** DVD **\$14.95**



Expert instructors take you into the field for hands-on learning—here mist netting bats.

Join Us!

Become a member and create a lasting relationship with Zion National Park. As a member you will help us publish nearly 1 million pieces of free informational literature for park visitors each year, support the very successful Junior Ranger and educational outreach programs to local schools, and additional projects.

Individual \$35 per year

Includes membership card allowing you a 20% discount at ZNHA stores, and discounts with other cooperating associations in the U.S., member pin, a newsletter twice a year, and an annual Christmas gift.

Family \$50 per year

Includes everything above, plus extra membership cards.

Name _____

Address _____

City _____ State _____ Zip _____

Make checks payable to ZNHA Mail to: Zion Natural History Association, Zion National Park, Springdale, Utah 84767

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Large Vehicles



The tunnel was built for cars like this 1930s model.

THE ZION-MT. CARMEL TUNNEL IS BETWEEN THE EAST ENTRANCE AND ZION CANYON. IT WAS BUILT in the 1920s when cars were small and few in number. Some large modern vehicles will not fit without assistance.

Vehicle Size

Vehicles sized 7'10" in width or 11'4" in height, or larger, are required to have an "escort" (traffic control) through the Zion-Mt. Carmel Tunnel. Vehicles this size are too large to stay in their lane while traveling through the tunnel. Nearly all RV's, buses, trailers, 5th wheels, campers, and boats will require an escort.

Arranging An Escort

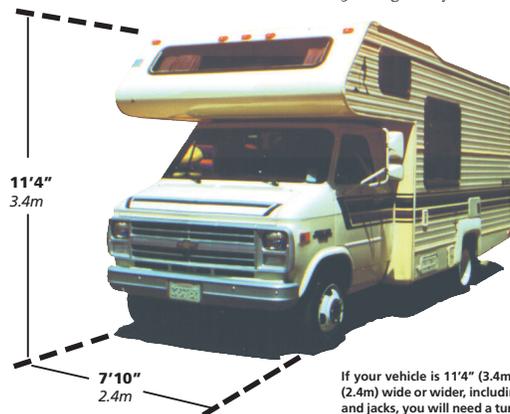
Visitors requiring an escort *must pay a \$10 fee per vehicle in addition to the entrance fee.* Pay this fee at either park entrance before proceeding to the tunnel. The fee is good for two trips through the tunnel for the same vehicle during a 7-day period.

You will not be following an escort vehicle through the tunnel. Rangers will stop oncoming traffic and when the tunnel is clear, you will drive down the middle of the road. We apologize for the delays that many visitors will encounter as a result of this safety precaution. Rangers are stationed at the tunnel:

- March 8-April 3, enquire at entrance station.
- April 4-October 2, 8 a.m. to 8 p.m. daily
- October 2-October 30, enquire at entrance station.

Prohibited Vehicles

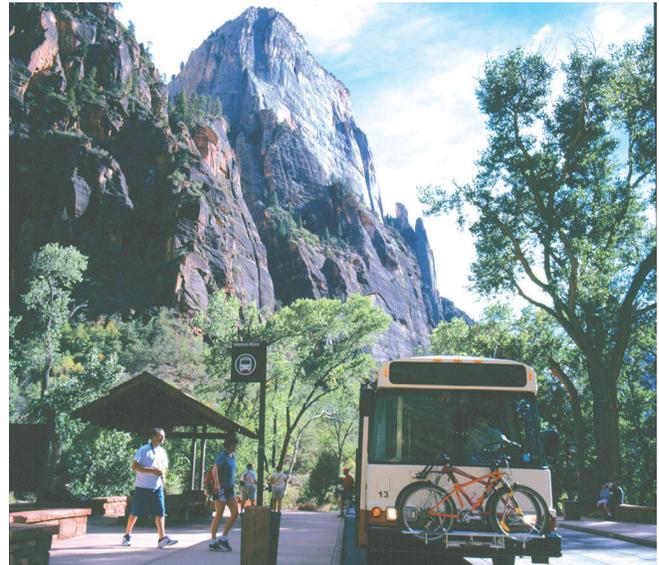
- Vehicles over 13'1" tall. •Semi-trucks.
- Commercial vehicles. •Vehicles carrying hazardous materials. •Vehicles weighing more than 50,000 lbs.
- Single vehicles over 40' long. •Combined vehicles over 50' long. •Bicycles and pedestrians.



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If your vehicle is 11'4" (3.4m) tall or taller or 7'10" (2.4m) wide or wider, including mirrors, awnings, and jacks, you will need a tunnel escort.

Shuttle Schedule



Shuttle at Weeping Rock with the Great White Throne in the background.

THE ZION CANYON SCENIC DRIVE IS BY SHUTTLE ONLY FROM APRIL THROUGH OCTOBER. *Private vehicles are not allowed.* Plan your trip to include using the shuttle. There is room for backpacks and climbing equipment. Buses are fully accessible. Pets are not allowed.

Spring & Fall

April 1-May 22

Sept. 12-Oct. 31

Zion Canyon Loop

Visitor Center departures

first bus	6:45 a.m.
15 minute service	6:45-8:30 a.m.
7-10 minute service	8:30 a.m.-8 p.m.
15 minute service	8-9 p.m.
last bus	9:30 p.m.
last departure from Temple of Sinawava	10 p.m.

Springdale Loop

Express bus up-canyon leaves

Majestic View	6:30 a.m.
15 minute service	6:30-7:30 a.m.
10 minute service	7:30-11 a.m.
15 minute service	11 a.m.-4 p.m.
10 minute service	4-9 p.m.
15 minute service	9-10 p.m.
last bus	10 p.m.
last departure from Majestic View	10:15 p.m.

Summer

May 23-Sept. 11

Zion Canyon Loop

Visitor Center departures

first bus	5:45 a.m.
30 minute service	6:30-7 a.m.
10-15 minute service	7-9 a.m.
6-10 minute service	9 a.m.-8 p.m.
15 minute service	8-9 p.m.
30 minute service	9-10:30 p.m.
last bus	10:30 p.m.
last departure from Temple of Sinawava	11 p.m.

Springdale Loop

Express bus up-canyon leaves

Majestic View	5:30 a.m.
20 minute service	6:40-7 a.m.
10-15 minute service	7 a.m.-10 p.m.
30 minute service	10-11 p.m.
last bus	11 p.m.
last departure from Majestic View	11:15 p.m.



Avoid parking hassles—ride the Springdale Shuttle and walk into the park



Shuttles take you to all trailheads and points of interest in Zion Canyon.



Printed with SOY INK

Printing made possible by the Zion Natural History Association. Storage space provided by Wal-Mart Distribution Center, Hurricane, Utah.

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