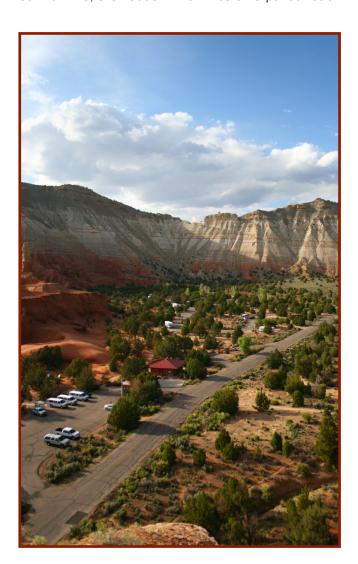


Kodachrome Basin

Kodachrome Basin is a spectacle of towering sandstone chimneys, changing in color and shadow with the day's mood - from red-tinged spires against a blue sky, to soft evening light settling over the desert. This color and contrast prompted the National Geographic Society in 1949, with consent from Kodak Film Corp., to name the park Kodachrome.

Nearly 70 monolithic spires, ranging from six to 170 feet in height, jut up from the valley floor or protrude from the sandstone. These natural towers stand like stone sentries overlooking the park and create a backdrop that is sure to delight the senses and spark the imagination. The redrock and semi-desert climate make this state park attractive to visitors all year.

Kodachrome Basin can be reached by following Scenic Byway 12, an All American Road and one of the most spectacular drives in the West, to Cannonville, then south nine miles on a paved road.



Geology

The story of Kodachrome Basin began more than 180 million years ago. It is the story of the Earth itself, and of the constant changes that occur due to the forces of nature. Like the chapters in a book, each rock layer reveals a chapter in Kodachrome Basin's history, telling of times when this desert land was covered by vast inland seas and raging rivers. It reveals times of great violence and upheaval and times of relative peace, and how the relentless power of wind and water shaped the landscape around us.

You will have to reread this story many times because, unlike most stories, this one has no ending. It is being rewritten everyday by each drop of rain that falls and each gust of wind that blows.



Geologic History

Kodachrome Basin State Park is located on the Colorado Plateau, an uplifted region that covers much of the four corners area of Utah, Arizona, New Mexico and Colorado. Within the park, the exposed formations range from the middle Jurassic Period (180 million years ago) to the Cretaceous Period (95 million years ago).

Carmel Formation: Deposits from an inland sea that existed 180 million years ago formed this layer. This is the oldest exposed formation in the park. The Carmel Formation is characterized by solid layers of the mineral gypsum, which forms white striations in the red colored cliffs in the lower elevations of the park.

Entrada Formation: Lying just above the Carmel Formation is the red colored Entrada. The Entrada was formed from deposits that were laid down during the mid-to-late Jurassic Period, approximately 180 to 140 milllion years ago. It is

primarily composed of fine grained sandstone along with gypsum, shale, quartz and clay. This formation is one of the most scenic in the park due to its color. It also forms the ubiquitous "slickrock" of southern Utah. Most of the sedimentary pipes found within the park occur in this formation.

Henrieville Sandstone: Deposited near the end of the Jurassic Period, the Henrieville Sandstone is white to tan in appearance. Deposits of Henrieville Sandstone are almost unnoticable in the main part of the park. However, Grosvenor Arch, located approximately 11 miles south of the park, was formed within this sandstone.

Dakota and Tropic Shale Formations: These are the uppermost formations visible in the park. They were deposited approximately 95 million years ago when a vast seaway covered much of the interior of North America, including most of Utah.

Tropic Shale		=
Dakota Formation		
Henrieville Sandstone		
	Escalante Member	//////
Entrada Formation	Cannonville Member	
	Gunsight Butte Member	
Carmel Formation	Wiggler Wash Member	
	Winsor Member	00 000 0 000



Sedimentary Pipes

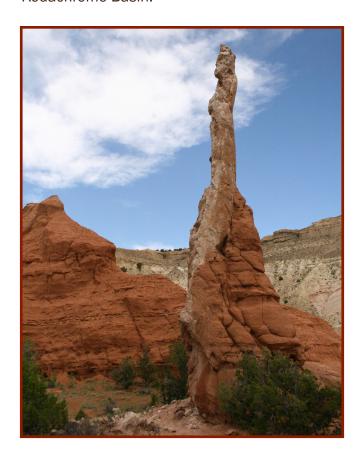
The most distinctive features in the park are the large columns of sedimentary rock that rise from the basin floor. These are known as sedimentary pipes. Approximately 67 sedimentary pipes have been identified in Kodachrome Basin and in the area adjacent to the park. Geologists are unsure of the exact origin of the pipes, but several theories have been proposed that might explain their formation.

Evidence recorded in the rock layers within the park indicate this area was seismically active throughout most of its geologic history. Earthquakes may have provided the force necessary to cause coarse, water-saturated sediments to scour pathways through the overlying rock layers. These pathways became filled with the coarse sediment and eventually re-cemented and became harder than the surrounding rock. Over time, erosion has removed the softer layers, revealing the pipes.

A second theory explains the pipes as the remnants of ancient springs. The springs became choked with sediments, which eventually cemented together and became more erosion-resistant than the surrounding rock. The softer rock layers were eventually worn away by erosion, exposing the sedimentary pipes.

Recently, a new theory proposes that the pipes were formed from water-saturated pockets buried under layers of other sediments over a period of several million years. Pressure from the overlying sediments forced the wet slurry upwards. The rising slurry scoured pathways through the overlying rock, eventually cementing into hard rock. Erosion stripped away the softer rock layers revealing the landscape you see today.

No matter how they were formed, the pipes provide a landscape that is truly unique to Kodachrome Basin.





Plants

At an elevation of 5,800 feet, the lands of Kodachrome Basin are classified as semidesert in the upper Sonoran life zone. Plants must adapt to drought conditions and extreme temperatures. Medium-sized trees include pinion pine and Utah juniper. Common plants are big sage, rabbit brush, single leaf ash, Ephedra (Mormon tea), Fremont holly, and buffalo berry. Flowering plants and grasses also thrive and include bee balm, Indian paintbrush, evening primrose, yellow flax, biscuit root, locoweed, Indian rice grass, corral grass, and needle and thread grass.

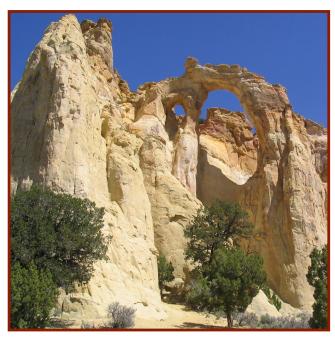


Wildlife

Animals must also adapt to this rather harsh environment. Larger animals include mule deer, and mountain lion or cougar. Coyote, bobcat, and grey fox commonly prey on the black-tailed jack and cottontail rabbits, grey squirrel, and chipmunk. There are also kangaroo rats, mice, Sonoran whip snakes, gopher snakes, Great Basin and midget faded rattlesnakes, and fence and whip lizards. Several species of birds include common raven, golden eagle, pinion jay, scrub jay, rock wren, logger head shrike, titmouse, and chipping sparrow.

Nearby Activities

In addition to photography, hiking, horseback riding and mountain biking, visitors should plan to visit Grand Staircase - Escalante National Monument. Grosvenor Arch, an intricate double arch located 11 miles southeast of Kodachrome Basin, is one of the state's most impressive arches. Also, Cottonwood Canyon and the Paria River area, south of Kodachrome Basin, offer unlimited possibilities to explore.



Facilities

Facilities include a 31-unit campground with restrooms, hot showers and a sewage disposal station. Each campsite has a picnic table, cement pad, fire pit and barbecue grill. Two large group areas, with picnic tables, fire pits, and barbecue grills are great for group outings. Fresh water and firewood are available year-round.

Reservations

Reservations are available for individual and group-use campsites. Individual campsite reservations may be made a minimum of two days in advance of arrival date and up to 16 weeks in advance from park check-out date. Group-use reservations may be made up to 11 months in advance.

To make a reservation, call (801) 322-3770 within Salt Lake City or toll-free 1 (800) 322-3770. Reservations are not required but are advised. Unreserved sites are available on a first-come, first-served basis.

User Fees

Day-use and camping fees are charged. Additional fees are charged for reservations.

Services

Deluxe full service, climate-controlled cabins with full bath and shower are available for rent from Red Stone Cabins. Located in the center of the park, Red Stone Cabins provides information, food, ice, and supplies. (435) 679-8536.

Weather

Have you ever heard the saying "if you don't like the weather, wait five minutes and it will change?" Perhaps nowhere is this truer than in southern Utah. The weather here is very unpredictable and can change rapidly and with very little warning. Plan ahead and be prepared for inclement weather at all times of the year.

<u>Spring:</u> April, May, and early June can be very pleasant times of the year at Kodachrome Basin. Daytime temperatures are generally warm, but overnight temperatures can drop into the 20s. There is still a chance of snow in April and blustery winds are a possibility throughout the season.

<u>Summer:</u> Late June, July, August, and early September are the hottest months at the park. Daytime highs are in the 90s to near 100 degrees. Nighttime temperatures are perfect for sleeping and often drop into the 50s. Summer thunderstorms are a real threat this time of year and can produce heavy downpours, extreme winds, dangerous lightning and flash flooding.

<u>Fall:</u> Warm days and cool nights are the norm in late September and early October with daytime highs in the 70s and overnight lows in the 30s. By the middle of October, nights can get very cold. The first hints of winter are experienced in November as both daytime high temperatures and overnight lows begin to drop and snow becomes a possibility.

<u>Winter:</u> Cold is the watchword through the winter months at the park. Daytime highs from December into March are often not much above the freezing point. Overnight lows can be well below zero. Heavy snow can occur at any time during this period, making travel and outdoor activities perilous, if not impossible.



Safety

<u>Weather:</u> Summer temperatures can be extremely hot. Seek shade during the hottest part of the day and drink plenty of water...at least one gallon per person, per day. Dress appropriately (loose fitting, light colored cotton or lightweight, breathable synthetic clothing is best) and wear sunscreen and a hat.

Summer thunderstorms can bring frequent and extreme cloud-to-ground lightning strikes. Seek shelter anytime thunderstorms are in the area. These storms can produce large amounts of rain, which can cause flash flooding in low-lying areas, in washes and canyons, and along streams. Damaging hail is also common from these storms.

Temperatures during winter months can be extremely variable and weather conditions can change rapidly and without warning. Wear layers of clothing and equip yourself for extreme cold, wind, and precipitation.

<u>Animals:</u> Rattlesnakes, scorpions, and poisonous spiders all inhabit this area. LOOK before putting your hands in or under vegetation, in rocky crevices, or in any other area where these animals might seek shelter. Always carry a light at night, and watch for snakes along roadways, trails, and walking paths.

<u>Roads:</u> Most roads in this area are dirt or gravel and can quickly become impassible due to rain or snow. Make sure your vehicle is in good repair and that you have at least one good spare tire and a reliable jack before traveling on backcountry roads. Take water, food and extra clothing with you.

Check current road conditions at the park visitor center or at any BLM Visitor Center before traveling. Always leave a travel itinerary with a friend or family member when traveling in the backcountry.



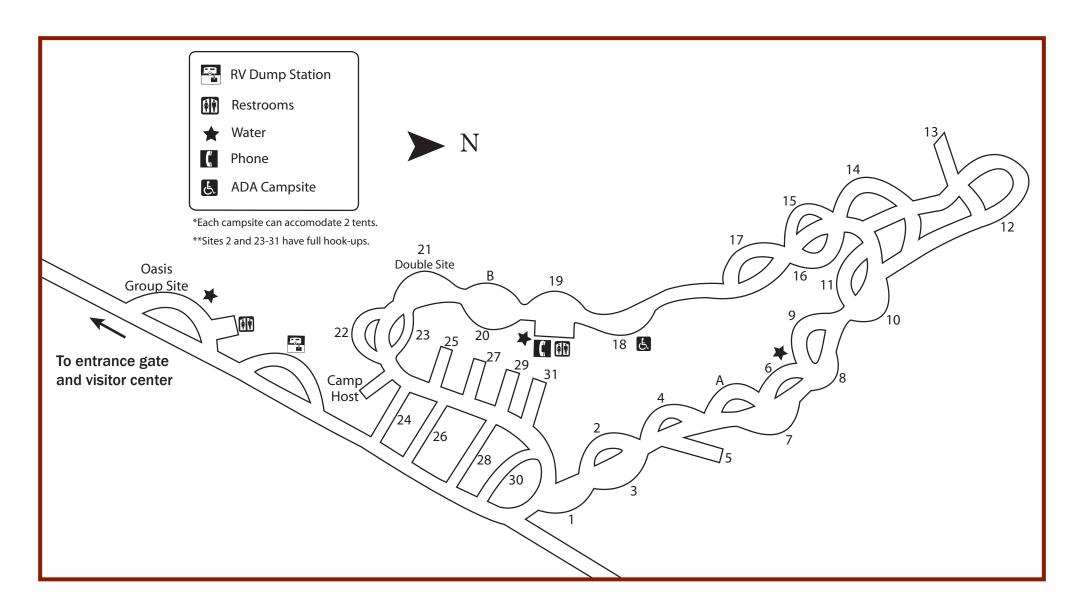
Cell phones <u>DO NOT</u> work in this area!





PLEASE ENJOY YOUR VISIT
AND
PLEASE STAY SAFE!

Camping at Kodachrome Basin



Park Guidelines

Please observe the following park regulations to ensure a safe and pleasant visit.

Camping - Camp only in designated areas. Each permit covers one vehicle and any attached recreational equipment. There is an extra fee for additional vehicles or camping equipment. Only one extra vehicle and up to eight people are allowed in a campsite.

- * Sites 1-28 are reservable sites and are available on a night-to-night basis only.
- *Sites A, B and C are first-come, first-served and are available for up to 14 nights.

Fires - Campfires may be built in specified areas only. Do not leave fires unattended. Use only water,

not dirt or sand, to extinguish fires. Gathering firewood is prohibited.

Fireworks - Unless authorized by the park manager, explosives, fireworks or firecrackers are prohibited in state parks.

Pets - Pets must be on a maximum six-foot leash at all times. Service animals are the only animals admitted in park buildings. Do not leave pets unattended and please clean up after them.

Plants and Animals - All plants, animals, minerals and other natural features in state parks are protected. It is unlawful to remove, alter, or destroy them.

Trash - Please dispose of trash properly. Receptacles are located in the campground and at the Oasis Group site. Please do not burn trash in fire rings or grills. **Vandalism** - It is unlawful to mutilate or deface any natural or constructed feature or structure. Please help keep our parks beautiful.

Wastewater - It is unlawful to dump or drain wastewater from campers or trailers onto the ground or into lakes and streams. A disposal station is located on the east side of the campground.

Vehicles - Vehicles and bicycles must stay on roadways or designated trails. Please, no bicycles on campground pathways. OHVs not registered as "street legal" must be kept on trailers while in the park.

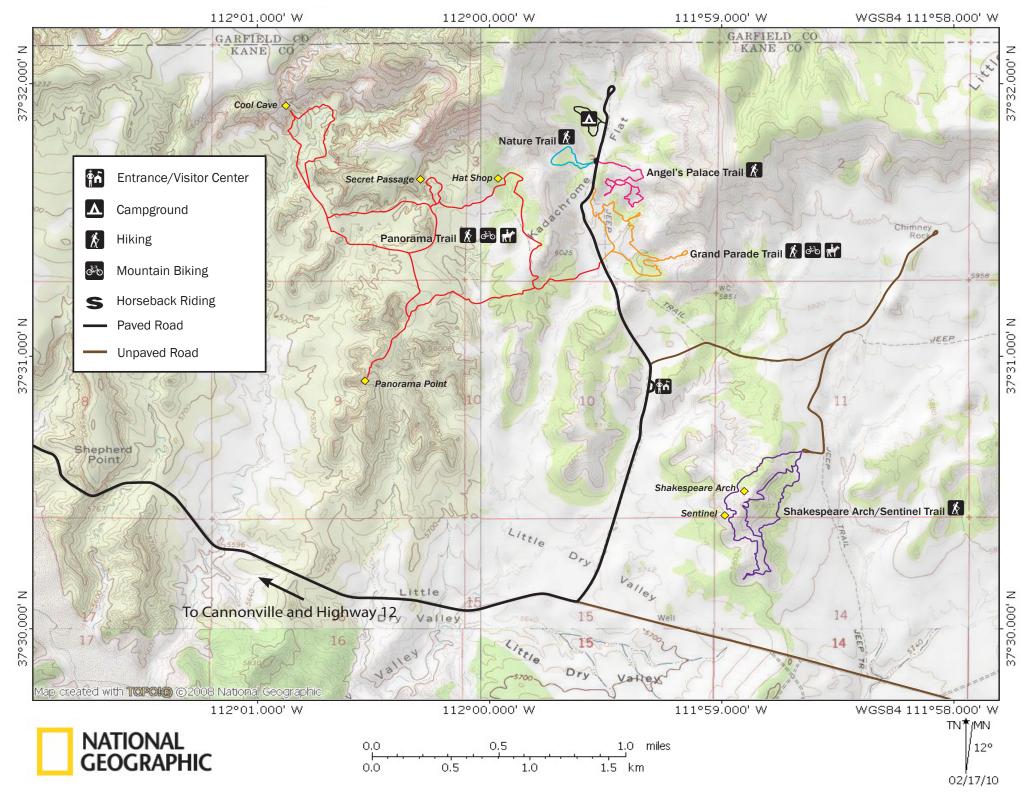
Quiet Hours - 10:00 p.m. to 7:00 a.m. quiet hours are strictly enforced. No unreasonable noise at anytime.

Generator Hours - Noon to 4:00 p.m. only.





Kodachrome Basin Trails



Trail Rules and Regulations

- 1. Hike only on designated trails. Hiking off trail (shortcutting, crosscutting, creating "social" trails) can damage fragile desert plant life and soils, and increase erosion and runoff.
- 2. Rock faces within the park are extremely unstable and unsafe. Hiking, climbing, bouldering, or scrambling on rock faces is strictly prohibited.
- 3. No backcountry camping.
- 4. Pets must be kept on leash at all times. Please clean up after your pet.
- 5. All plants and animals within the park are protected by law. Do not pick or damage plants and never harass or harm wildlife.
- 6. Be prepared and stay safe. Know your route, your physical limitations, and the weather forecast. Always carry plenty of water.

Please Stay On Trails

Cryptobiotic crust is a community of organisms that lives on desert soils. It provides critical nutrients to plants, absorbs and holds water, and aids in preventing erosion. When mature, it appears as a lumpy black crust, but is nearly invisible in early stages.

One footprint can destroy decades of growth.

Please stay on designated trails. If you must walk elsewhere, stay on bare rock or walk in washes (dry stream channels).

Don't trample the fragile crust.

Trail Descriptions

Grand Parade Trail: — A scenic 1.5-mile (2.4 km) trail that stays on the floor of Kodachrome Basin. Users will be able to observe bird and plant life and explore two box canyons along the trail. Difficulty: Easy. Open to: Hikers, horses, bicycles (Box canyons are open to foot travel only)

Panorama Trail: — Winding its way across the western side of the park, this trail allows the user to view several sedimentary pipes and explore some interesting geological features such as "Cool Cave," "Secret Passage," and "The Hat Shop." It can be done as either a 3-mile (4.85 km) or a 6-mile (9.7 km) loop. Difficulty: Easy/Moderate. Open to: Hikers, horses, bicycles

Angel's Palace Trail: — Rising 150 feet (46 m) above the basin floor, this 1.5-mile (2.4 km) trail affords magnificent views of Kodachrome Basin, Bryce Canyon and the surrounding area. It is an excellent trail for photographers. Difficulty: Easy/Moderate. Open to: Hikers

Nature Trail: — Informational panels along this 0.5-mile (0.8 km) hard surface trail will give the user an introduction to the plants, animals, and geology found within Kodachrome Basin. Difficulty: Easy. Open to: Hikers, ADA accessible

Shakespeare Arch – Sentinel Trail: — A 1.7-mile (2.7 km) loop that gives access to Shakespeare Arch, the only large natural arch within the park. This trail also gives the user magnificent views of the Grand Staircase-Escalante National Monument, which surrounds the park. The Slickrock Cutoff provides a more challenging alternate route as it winds its way over slickrock behind Shakespeare Arch and Sentinel Spire. Difficulty: Easy to Shakespeare Arch (0.5 miles/0.8km), Moderate to strenuous thereafter. Open to: Hikers

Kodachrome Basin Junior Ranger Program



If you would like to become a Junior Ranger at Kodachrome Basin State Park, please complete the following activities. If you need help, you can ask your parents or park staff. When you have finished the activities, take this book to the camp host or a ranger and they will sign it and issue you an official Junior Ranger badge.

Please Remember!

Hike only on established hiking trails and tell your friends and family to do the same.

Drink plenty of water.

Tell your parents where you are going.

If you see a snake or scorpion, let them be, and tell a ranger.

Litter Project

To complete this activity, use an extra bag or ask one of the park staff for a litter bag and then fill it with as much litter as you can. No fair getting litter from your car or garbage can. Show the bag to one of the park staff for credit.

Park Staff Signature

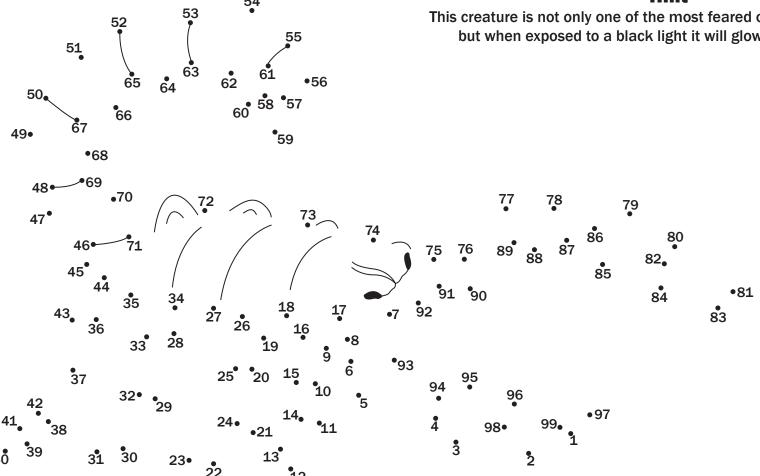




Dot-To-Dot

Hint

This creature is not only one of the most feared of the desert dwellers, but when exposed to a black light it will glow a greenish color.



Wildlife Identification

Match the clues to the creatures on the right.

- 1. This little rodent is often seen foraging for seeds and berries, which it carries in pouches in its cheeks. It is gray or buff above and its underside is white.
- 2. These noisy birds have a long wedge-shaped tail. When they fly, large patches of white feathers flash prominently.
- 3. This member of the dog family is very secretive and may not be seen during the day. But, you may hear its howl or yelp in the evening or just as the sun comes up.
- 4. This bird is very wary, solid black and feeds mainly on dead animals found along the road.
- 5. This medium-sized bird inhabits the pinion-juniper and oak forest: its voice is a harsh and excited shreeep sound. It is a drab blue color.
- 6. This bird is most commonly seen on lawns searching for worms. It has a reddish-brown breast, and a white circle around its eyes.
- 7. This creature is the most common reptile found at Kodachrome. It is often seen scurrying from bush to bush or sunning itself on a rock.
- 8. This fairly common insect can be identified most readily by its cross-striped abdomen, and slow travel. It is most active at night and is harmless to people.



Scrub Jay _



Robin ___



Coyote ___



Raven ___



Fence Lizard ____



Jerusalem Cricket _



White-tailed
Antelope Squirrel _



Magpie ____

Geology Word Search

In the unique geology of Kodachrome there are 67 sandpipes. The geology is made up of different layers of sandstone. Listed below are some of the names of the layers of sandstone and rocks. See if you can find the words from the list below in the puzzle and circle them.

C	Α	R	M	Ε	L	Т	F	Т	R	S	S	K	G	Н
Α	R	C	Н	Ν	Н	I	Ε	R	R	Α	L	0	Υ	В
L	С	1	G	Т	Т	U	L	0	L	Ν	1	Ε	Р	G
С	Н	Ε	R	R	S	Н	D	Р	D	D	С	D	S	0
I	T	Н	I	Α	Ε	Α	S	1	J	Р	K	0	U	M
Т	T	S	Α	D	D	D	Р	C	J	I	R	M	M	В
Ε	Q	U	Α	Α	1	R	Α	S	Α	Р	0	Z	K	I
K	Α	Т	C	M	M	Н	R	Н	Н	Ε	С	0	Р	В
R	Α	Р	I	D	Ε	I	Т	Α	D	Α	K	0	Т	Α
M	1	S	С	R	Ν	J	Н	L	K	L	1	K	Ε	M
C	0	N	Λ	D	т	Λ	N	_	n	_	C	_	D	т

Circle these words in the puzzle above:

Sand Pipe	Carmel	Dakota	Tropic Shale
Calcite	Feldspar	Entrada	Sediment
Arch	Desert	Gypsum	Slick Rock

Junior Ranger Promise

As a Junior Ranger, I will do my part to help make Kodachrome Basin a clean, safe and beautiful place to enjoy.

I can help by:

Staying on the pathway when I go hiking.

Keeping the park clean.

Obeying all park rules.

I his is to certify that	has
completed the Kodachrome Basin State Park	
Junior Ranger Program.	

Park	Staff	Sig	nature
I air	Juli	OIE	Hature

Date

Congratulations you are now a Kodachrome Basin Junior Ranger.

Park Location:

The park is located nine miles southeast of Cannonville off Highway 12.

Operating Hours:

The park is open year-round. 6 a.m. to 10 p.m.

Address Inquiries To:

Kodachrome Basin State Park P.O. Box 180069 Cannonville, UT 84718-0069 (435) 679-8562

Utah State Parks and Recreation P.O. Box 146001 Salt Lake City, UT 84114-6001 (801) 538-7220, (877) UT-PARKS stateparks.utah.gov

For Reservations Call:

(800) 322-3770

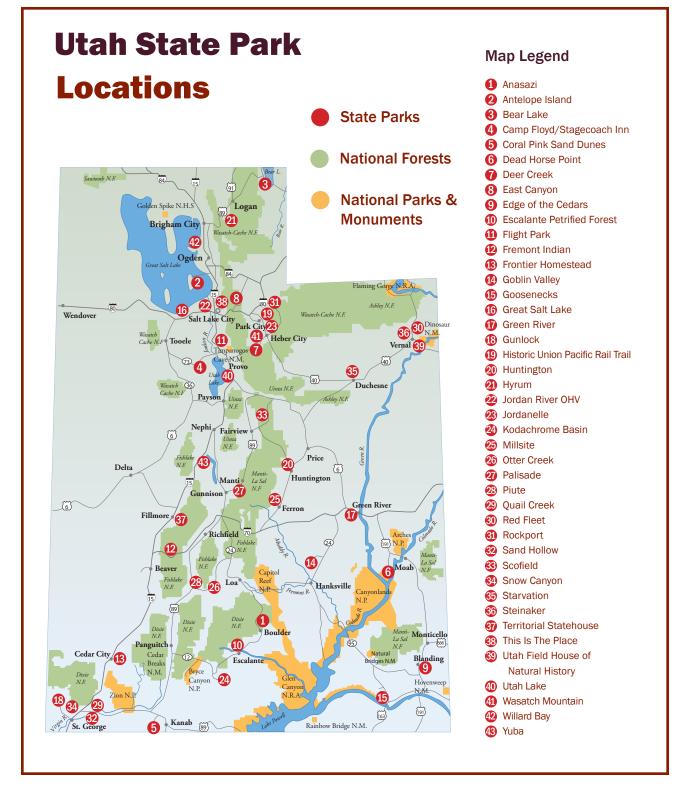
Utah State Parks Mission:

To enhance the quality of life by preserving and providing natural, cultural and recreational resources for the enjoyment, education and inspiration of this and future generations.

Information contained in this brochure was accurate at the time of printing. Policies, facilities, fees, hours and regulations, etc., change as mandated. For updated information please contact the park.

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Your park fees provide for the care, protection and enhancement of this park.

