

Hikers walk around a lava tube
in Snow Canyon State Park,
part of nearly 69,000 acres
near St. George protected
as Red Cliffs Desert Reserve.

TREKING FOR TORTOISES

Story and photographs
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Red Cliffs Desert Reserve near St. George
is a refuge for rare reptiles and hikers alike





A ROCKY RIM AWASH in the tones of ruddy boulders and blue mountains borders St. George and its bustling adjacent Washington County cities. This natural barrier not only divides human development from the desert but marks one of the nation's rarest ecological melting pots. Plants and animals existing nowhere else in the world mingle here at a unique junction of ecosystems where the Mojave Desert meets the Great Basin and Colorado Plateau.

This is the home of the threatened Mojave Desert tortoise as well as sidewinder rattlesnakes, Gila monsters and creosote bushes. Established in 1996, Red Cliffs Desert Reserve sets aside nearly 69,000 acres in a patchwork quilt of stunning public lands to protect the at-risk species and their habitat. While providing an oasis for wildlife, the preserve also offers respite for recreating rock climbers, mountain bikers and equestrians.

Hikers especially benefit from more than 70 named trails totaling nearly 200 miles. Routes range in difficulty from easy,

family-friendly strolls on well-maintained surfaces to strenuous adventures along rocky terrain requiring route-finding skills and extensive trip planning. We present the reserve's trails from each of its regions and elevation zones. Equipped with a map, sturdy hiking shoes and plenty of water, visitors have everything required to sample what this unique environment offers. As the fable of "The Tortoise and the Hare" recommends, a slow and steady pace will give the best chance of discovering desert tortoises and their friends.

CENTRAL City Creek

A perfect place for visitors to familiarize themselves with flora and fauna that might be encountered in the reserve is Red Hills Desert Garden. Located on the reserve's doorstep just north of Red Hills Parkway, the 4.5-acre garden features more than 5,000 water efficient plants, including fire-cracker penstemon, creosote bushes and claret cup cactus. Educating visitors about

how water is the region's most valuable resource, the garden's plants use an average of 5 million fewer gallons annually than a similar sized turf landscape. A meandering stream with a viewing area housed in a replica slot canyon showcases several endangered fish species from the nearby Virgin River. Additionally, the garden's trails are accentuated with fossilized dinosaur tracks, left 200 million years ago by at least three species, including dilophosaurus, the frilled-collared, poison-spitting star of *Jurassic Park*.

Another accessible entry point into the world of Red Hills Reserve is the 52-acre Pioneer Park. Attractions in this rock climber's paradise appealing to scrambling hikers with as little as an hour to spend include overlooks of St. George and the painted "Dixie Rock," a narrow slot canyon, a small natural arch and a historic pioneer cabin. Those with more time can continue on the Pioneer Rim or T-Bone trails leading deeper into the reserve with increasingly fewer visitors and greater chances of finding wildlife.

Broken Mesa

Marked by maps and trail signage, the reserve is classified into two environmental zones based on elevation and user impact. The lowland zone is more fragile, requiring hikers to stay on established trails and in developed campgrounds. A living cryptobiotic crust, often visible as a black sheen encapsulating the soil, is composed of microbes that prevent erosion and increase humidity, but which can be killed for decades by only a single footstep. The upland zone is slightly more biologically durable. Careful cross-country, off-trail travel is permitted where hikers can ramble through the red rocks. Primitive camping is permitted in places.

Special “step-over” gates are installed at backcountry trailheads to prevent motorized travel outside of designated roads. Those looking to sample the transition between lowland and upland regions with automotive assistance may use the gravel Cottonwood Road, which ascends a mesa to access trails like Yellow Knolls, High Point and Broken Mesa Rim Trail. From the high perch of overlooks on these trails, lucky birdwatchers may spot a plethora of songbirds like lesser goldfinches and canyon wrens, or raptors such as peregrine falcons.

Some portions of this area’s trails display remnants of recent wildfires, including the 2020 Turkey Farm Road Fire – a blaze started by three teenagers playing with fireworks – which consumed nearly 12,000 acres, and a 2005 fire that scorched 7,500 acres. Both events led to widespread desert tortoise deaths, and their numbers have not recovered to previously recorded levels. Yet along these trails, nature shows its rejuvenating powers with wildflower displays of desert globemallow, sego lily and Palmer’s penstemon springing from the ashes.

On previous page, hikers use a rope and sandstone foot holes to maneuver over a pool along the Red Reef Trail in Red Cliffs. A greater roadrunner takes a breather near Red Hills Desert Garden. A Durango Delight agave grows nearby. A side-blotched lizard scampers along petrified sand dunes at Snow Canyon State Park.





Desert Reserve

The Red Cliffs Desert Reserve is the meeting place of three great ecosystems: the Mojave Desert, Great Basin and Colorado Plateau. It encompasses nearly 69,000 acres of public land north of St. George. The reserve is home to many rare species, including the farthest north populations of Mojave Desert tortoises, Gila monsters and sidewinder rattlesnakes.



Seen from the city of Hurricane, the Virgin River flows past the red cliffs of the Babylon area. One of the area's most notable natural attractions is Babylon Arch, which is tucked into a maze of crimson sandstone fins.

A lesser goldfinch enjoys a nice view from its high perch in a tree along the Broken Mesa Rim Trail.



WEST

Snow Canyon, Paradise Canyon & Red Mountain

The reserve's western reaches exhibit some of the most precipitous separations between lowland and upland environments. Rising above the community of Kayenta and reachable from the Ivins trailhead to the south as well as a northern trailhead, the Red Mountain Wilderness is a network of canyons fed by clear mountain streams descending from high plateaus dotted with juniper and ponderosa pine. Seeps in the lower slickrock hydrate bouquets of maidenhair fern, scarlet monkeyflower and columbine. Motorized use is prohibited in the wilderness area, so opportunities abound for solitude, natural quiet and unconfined recreation.

Nearby, Snow Canyon State Park was the first public land set aside to protect a portion of the Red Cliffs. The park was named for prominent 19th century settlers Lorenzo and Erastus Snow but has been occupied since the days of Paleoindian mammoth hunters. The park's Petrified Dunes trail is an ideal place to examine the region's geology, which includes 2,500-foot-thick quartzite sand dunes that have been cemented into stone resembling

striped, orange creamsicles, as well as the porous, jet-black remains of lava flows originating from the cinder cones near modern-day Diamond Valley to the northeast. Other popular trails include Sand Dunes, which features a non-petrified dune acting like a giant sandbox that children love to climb, and Johnson Canyon, displaying Navajo sandstone cliffs shading a riparian canyon and a natural arch. Entering Snow Canyon requires a fee depending on the method of travel, and some trails may be closed seasonally.

Below the state park, the Chuckwalla trail connects to loop trails exploring the sandstone walls of Paradise Canyon and its weathered rock outcrops popular with climbers and boulderers. The trail is named for a black, gray and brown lizard found here. Similar looking but venomous Gila monsters also inhabit the area. Gila monster venom is lethal to small mammals like mice, but no human deaths have been recorded since the early 1930s, when an intoxicated pool hall operator allegedly died after poking his thumb into the mouth of a Gila monster. The reptiles can be credited with saving far more lives than they have reportedly taken – a peptide first discovered in their venom is now synthesized in laboratories for use in a drug treating type 2 diabetes.

EAST

Mill Creek, Grapevine & Cottonwood Canyon

Maybe nowhere else in the reserve is the separation between development and desert more pronounced than the lowland Mill Creek and Grapevine areas, where it seems that with each footstep deeper into the reserve the din of vehicles traveling on Interstate 15 becomes ever more distant. The trails here become less tread upon and fade as they climb into the sparsely visited Cottonwood Canyon Wilderness, where the topography rivals the rugged red towers of distantly visible Zion National Park.

Mountain bikers and paleontology buffs delight in a dinosaur tracks site reachable by the short Dino Cliffs trail. Another notable hike in this region is Elephant Arch, a 5-mile round trip reached by the Mill Creek and Bone Wash trails. The sandy path leads to a splendid natural arch shaped similarly to the head and trunk of its namesake pachyderm.

The road to the Mill Creek trailhead to start this hike may be rough in places, so high clearance vehicles are recommended.





On previous page, a small arch is found in Pioneer Park. A carpenter bee pollinates blooms at Red Hills Desert Garden. Palmer's penstemon grows in soil disturbed by recent wildfires along the Broken Mesa Rim Trail.

MOJAVE DESERT TORTOISE



Protect Red Cliffs

Those lucky enough to spot a Mojave Desert tortoise often mistake them for the reserve's similarly shaped volcanic boulders, as the reptiles are suited to blending with their surroundings. Tortoises have a high, darkly shaded domed shell about 8-15 inches in length. Their limbs are stocky and covered with large scales. They spend 90 percent of their life in underground burrows or rocky shelters averaging 5-6 feet in length, though they are most active above ground in the cooler months from March-April and September-October.

The reserve has about 3,000 tortoises inhabiting a variety of shrub lands. They are most frequently found near washes remaining from flash floods or below rocky slopes. Desert tortoises are vegetarians, eating a variety of plants, flowers and fruits. Their mating season is April-October.

Seeing a wild tortoise is a rare, special experience, so fortunate witnesses should take photos and admire the animals from a distance. Tortoises may urinate as a defense mechanism if they are disturbed, losing valuable water in the hot desert that can lead to dehydration or death for the docile reptiles. It is illegal to pick up a tortoise, with one exception – if they are crossing a busy road or in immediate danger. To assist the tortoise, hold it low to the ground with both hands and move it in the direction it was headed. If there is a fence nearby, place it on the other side of the fence. Contact the reserve at (435) 680-1461 to report the sighting or to have a trained representative safely move the tortoise.



A cottonwood tree displays bright green new foliage along the Red Reef Trail in Red Cliffs.

Red Cliffs, White Reef & Babylon

One of the reserve's most revered hikes is the Red Reef Trail, a 2-mile round trip leading through a narrow canyon to a small seasonal waterfall in the far northeastern corner of Cottonwood Canyon. The trail passes beneath cottonwoods whose leaves glow neon green in late spring, contrasting beautifully with the scarlet tones of the narrow sandstone walls, pleasing photographers in early morning or late afternoon light. The hike starts at the Red Cliffs Recreation area, requiring a \$5 entry fee, and may be very popular in spring and fall. Other less crowded trails include the Anasazi, leading to pit houses and other Ancestral Puebloan archaeological remains, and Silver Reef trails leading to dinosaur tracks.

Southward, sights located near the White Reef trailhead include the Orson B. Adams House, a two-room sandstone abode built in the 1860s and now the sole remains of a Church of Jesus Christ of Latter-Day Saints pioneer settlement called Old Harrisburg. Bureau of Land Management restoration crews saved the building from caving in after purchasing the land in 2001. The remains of a movie set made for the 1959 Columbia Pictures film *They Came to Cordura*, starring Gary Cooper, can be visited from the neighboring Cordura Trail.

Just east across I-15, 19th century mining ruins like the Stormont Silver Mill await visitors who access the Babylon area from a sandy road suitable for high clearance vehicles and hike from the Toquerville Mine, Sand Cove and other trailheads. One of the area's most notable natural attractions is Babylon Arch, a span seemingly stolen from a Martian landscape tucked into a maze of crimson sandstone fins. The arch, resembling an eye of a massive needle, reveals itself to travelers on a dusty spur trail from Sand Cove. Most hikers turn around at the arch to complete a 1.5-mile out-and-back trip, but some continue farther out of the rock pinnacles to take a refreshing dip in the Virgin River at the trail's terminus.

Red Cliffs Desert Reserve gives hikers the opportunity to experience a range of trails, from easy day outings to strenuous overnight backcountry expeditions. No matter the type of trip, visitors leave with a lasting appreciation of conservation for the enjoyment of future generations. To check current weather conditions, research routes or learn more about the reserve, call (435) 301-7430 or visit redcliffsdesertreserve.com. 🐾

