

Issue:
SPRING - SUMMER 2009

Red Rock CANYON

Keystone Visitor Guide

NATIONAL CONSERVATION AREA

Please Pardon Our Dust; Something Great is on the Horizon

WITH THE VISITOR ARRIVAL CENTER SET TO OPEN THIS SUMMER, A MAJOR MILESTONE WILL BE CELEBRATED IN THE NEW RED ROCK VISITOR CENTER CONSTRUCTION PROJECT.

At that point, the displays will move from the current visitor center to the 8,900 square foot indoor portion of visitor arrival center.

Construction will continue as the former visitor center is rehabbed into an administrative building and the fee booth area/contact station is remodeled. By December, construction is expected to be completed. In the meantime, please bear with the potential inconvenience to your visit as traffic is rerouted to ensure safety during construction.

When the current visitor center opened in 1982, about 20,000 people visited Red Rock. Now more than a million people a year visit the area. To address this issue, the Secretary of the Interior approved funding under the Southern Nevada Public Land Management Act to build a new visitor center to provide enhanced visitor services to the



Photo: Construction work continues on the visitor arrival center.
by Kevin Routsong

increasing number of people who visit the National Conservation Area each year.

The new center will be better able to provide enhanced visitor services in four major components: construction of a new visitor center, redesign of the existing structure into an administrative building, construction of a new fee booth area and construction of related infrastructure and site work.

The facility is designed to encourage stewardship for public land by providing an outdoor experience that instills a sense of personal responsibility. Both the visitor center and the administration building components of the project will undergo the U.S. Green Building Council's Leadership in Energy and Environmental Design certification process.

The next time you visit Red Rock, be sure to stop by and enjoy the visitor center.



License Plate

You've enjoyed your visit to Red Rock and now you may be looking for a take-home memory of the National Conservation Area. If you are a Nevada resident, you have an opportunity to be reminded of your adventure by purchasing a Red Rock Canyon license plate.

The process is easy: go to the nearest Nevada Department of Motor Vehicles with your registration, ID and your old license plates. The charge for the new plate is \$61 with a one-time processing fee of \$5. Your normal renewal period will remain the same and plate renewals will be \$30.

Friends of Red Rock Canyon receives \$25 in revenue for the first year per plate and \$20 for renewals for these stylish license plates. All proceeds from the license sales will be used to support programs and services at Red Rock Canyon.

Hours of Operation

April 1 through September 30, 2009

◆ **Visitor Center**

8 a.m. to 4:30 p.m.

◆ **13-Mile Scenic Drive, Red Rock Overlook on State Route 159 and Red Spring**

APRIL 1 - 30

6 a.m. to 7 p.m.

MAY 1 - SEPTEMBER 30

6 a.m. to 8 p.m.



Photo: Pricklypear Cactus (*Opuntia phaeacantha*)
by Kate Sorom

What's Inside

[2] Desert Safety, Burros

[3] SNPLMA, Red Rock Trails Planning, Fire Ecology

[4] Changing Landscape, SMYC hike, Fees and Annual Passes, Why are the Rocks Red

[5] Red Rock Partners

[6] Rock Climbing, Petroglyphs & Pictographs

[7] Hike Descriptions

[8] Hiking Map, Contact Numbers

Photo: Indigobush (*Psoralea fremontii*)
by Kate Sorom



Desert Safety Tips

TO SAFELY ENJOY RED ROCK CANYON NATIONAL CONSERVATION AREA, PLEASE RESPECT YOURSELVES AND OTHERS BY RECOGNIZING THE CHALLENGES THAT VISITING THE MOJAVE DESERT PRESENTS.

Water

Drink at least one gallon (four liters) per day if you are hiking, the day is hot or the trail is exposed to direct sunlight. Carry at least one gallon of extra water per person in your vehicle. Bottled water is available for purchase at the visitor center. This is the only location where drinking water is available in the national conservation area.

Heat

Temperatures in Red Rock Canyon can average more than 100 degrees Fahrenheit during the summer months. The best protection against heat is drinking plenty of water and limiting exposure to the sun during the hottest parts of the day. If you feel dizzy, nauseous or get a headache, immediately get out of the sun and drink plenty of water. Dampen your clothing to lower your body temperature.

Protective Gear

For hiking, select shoes that will provide a comfortable fit, ankle stability and protection against cactus spines. Wear clothes that provide protection against the sun (i.e. hats, long sleeves, long pants, etc.) and apply sunscreen.

Wild Burros

MANY VISITORS ENJOY SEEING THE BURROS IN RED ROCK CANYON NATIONAL CONSERVATION AREA.

Burros are well adapted to the Mojave Desert and survive high temperatures and long periods of time without green forage by using shade under rocky cliffs and shrubs and by being most active in the early morning and late afternoon. They survive the apparent lack of water by seeking out the natural springs and hidden waterholes found throughout Red Rock Canyon. They eat grasses and shrubs. Burros are generally less than half the size of a horse. Males are called jacks and females are called jennies.

Feeding burros encourages these animals to congregate on roadways where many have been killed and injured by vehicles. Each year people are injured by burros as they try to feed or pet these animals. Feeding burros also causes them to lose their natural fear of roads and cars. Every year burros die from automobile collisions due to this adaptation. Burros are protected by the Wild and Free-Roaming Horses and Burros Act of 1971. People feeding, attempting to feed, riding, attempting to ride, handling, or otherwise harassing or disturbing wild horses or burros are subject to a citation.

TO OBSERVE THESE BEAUTIFUL WILD ANIMALS SAFELY:

- PICK A SAFE PLACE TO STOP AND PULL COMPLETELY OFF THE ROADWAY.
- OBSERVE THE BURROS FROM A DISTANCE. THE SAFEST PLACE IS FROM YOUR CAR.

Flash Floods

When hiking, avoid canyons during rainstorms and be prepared to move to higher ground. While driving, be alert for water running in the normally dry desert washes and across road dips. Do not walk or drive through flood water flowing across a road.

Lightning

Lightning storms frequently occur in the afternoon during the summer months. To prevent lightning from striking you, avoid high places and seek cover in buildings or in vehicles with the windows rolled up. If caught outdoors, crouch down on both feet with your arms wrapped around your knees and wait out the storm.

Desert Dwellers

Watch where you put your hands and feet. Rattlesnakes, scorpions or venomous spiders may be sheltered behind boulders or under rocks and shrubs. Do not touch, collect or try to kill these animals.

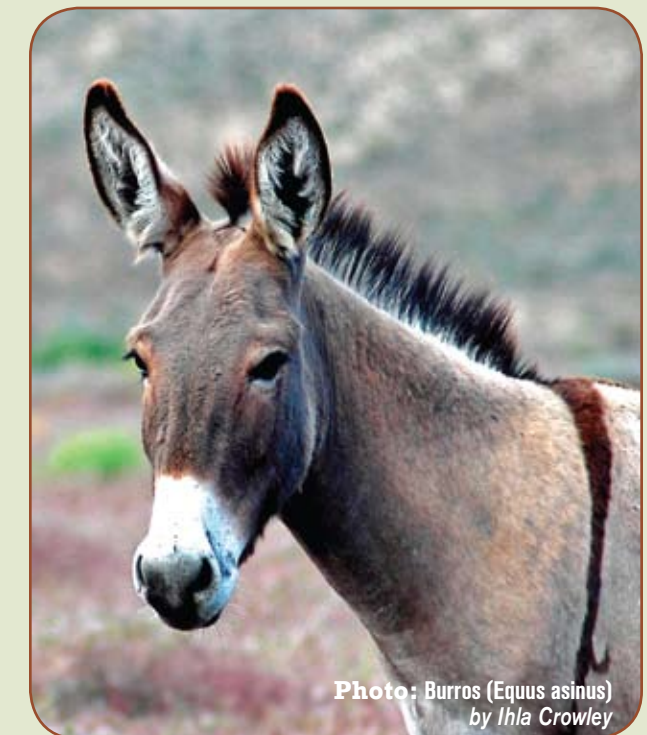


Photo: Burros (Equus asinus) by Itha Crowley

Photo: Manzanita (Arctostaphylos pungens) by Martina Herbert



Photo: Brittlebush (Encelia frutescens) by Kate Sorom

Las Vegas Valley Land Sales Fund Improvements at Red Rock

IN 1998, THE SOUTHERN NEVADA PUBLIC LAND MANAGEMENT ACT WAS PASSED.

This innovative act created a disposal boundary in the Las Vegas Valley that enabled the Bureau of Land Management to dispose of public lands. Funds generated from these sales are used to enhance the quality of life in Southern Nevada for residents and visitors by improving parks, trails and natural areas, supporting conservation initiatives, improving federally-managed facilities, creating habitat conservation plans and acquiring environmentally sensitive lands in Nevada in addition to providing funding for state education and the Southern Nevada Water Authority.

Red Rock Canyon National Conservation Area and its visitors has been the beneficiary of these funds on nine projects.

FOUR PROJECTS AT RED ROCK HAVE BEEN COMPLETED:

- RED ROCK FIRE STATION
- UPGRADING EXHIBITS AT THE VISITOR CENTER
- RED SPRING RESTORATION
- FENCING ALONG STATE ROUTE 159 TO KEEP WILD HORSES AND BURROS OFF THE ROADWAY

PROJECTS UNDERWAY INCLUDE:

- ◆ Expanding and providing utilities to the Red Rock Campground
- ◆ Adjusting the Cottonwood Valley trails network
- ◆ Creating an educational facility for school-aged children
- ◆ Creating a new visitor center at Red Rock
- ◆ Upgrading the scenic drive and paving a dirt road

Red Rock Trails Planning

TWO TRAILS PLANNING EFFORTS FUNDED BY THE SOUTHERN NEVADA PUBLIC LAND MANAGEMENT ARE UNDERWAY AT RED ROCK CANYON NATIONAL CONSERVATION AREA.

The first trails plan involves the feasibility of developing a recreational, non-motorized, multi-use trail system through the northern portion of Red Rock Canyon National Conservation Area. In June, an open house will be held to gather public comment on the feasibility of constructing a trail system in the northern portion of Red Rock, near State Route 157

and known in Red Rock Resource Management Plan as the Twilight Zone. A second workshop is planned for August.

The second trails plan involves the feasibility of developing a recreational, non-motorized, multi-use trail roughly paralleling State Route 159 for 30 miles.

Three open houses have been held to develop alternative trail corridors, design guidelines, corridor options and connections. The proposed trail would include eight trail heads and two underpasses. A Programmatic Environmental Assessment is expected to be available summer 2009.

Fire Ecology in Red Rock Canyon

BURNED LANDSCAPES AREN'T BEAUTIFUL, BUT FIRE IS A PART OF THE NATURAL WORLD, JUST LIKE THE WIND, THE RAIN AND OTHER NATURAL FORCES.

In fact, wildland fire is an essential feature of ecosystems that regenerates some plant communities to provide better forage for wildlife over time. Some plants and animals are adapted to fire and benefit from the changes it brings, but wildland fire is not helpful to all wildlife and plant communities. The Mojave Desert is one ecosystem that is not generally benefited by wildland fire.

Several wildland fires have burned in Red Rock Canyon over the past years, destroying habitat for Mojave Desert plants and wildlife by removing nutrient rich vegetation and shade for wildlife. Mojave Desert lands burned by wildland fire are more vulnerable to new wildland fires because they become overgrown with invasive annual grasses. Native plants must compete with the invasive annual grasses for water, soil nutrients and sunlight. Invasive annual grasses regenerate more quickly than native vegetation, creating the potential for new wildland fires and decreasing the ability of native vegetation to become dominate in the plant community.



Photo: Burned Joshua Trees (Yucca brevifolia) by Chris England

Rehabilitation efforts including seed and planting native vegetation are ongoing. In addition, monitoring regrowth and weed treatments will continue.

VISITORS TO RED ROCK CANYON CAN HELP REDUCE THE SPREAD OF NON-NATIVE ANNUAL GRASSES BY FOLLOWING A FEW GUIDELINES FOR RECREATION WITHIN BURNED AREAS:

- ◆ Stay on the designated roads and trails. Seeds of invasive grasses and weeds can "catch a ride" in your shoes, socks and car tires. Staying on trails allows the BLM to monitor invasive grasses and weeds and apply treatment to protect the native vegetation.
- ◆ Stay out of burned areas. The soil is extremely fragile after a fire has occurred. The roots of the vegetation have lost their integrity and hillsides are more susceptible to erosion. The desert crust that has formed before the fire will slowly erode unless the crust is broken by foot or vehicle traffic.



Why are the Rocks Red?

More than 600 million years ago, the land that would become Red Rock Canyon was the bottom of a deep ocean basin. Over time, changing land and sea levels resulted in the deposition of both ocean and continental sediments that became the gray limestone found at Red Rock Canyon today. About 180 million years ago, a giant sand dune field formed over what became the Western United States. Powerful winds shifted the sands back and forth, forming angled lines in the sand. Over time, the sheer weight of the layers of sand compressed into stone. This formation, locally known as Aztec Sandstone, is quite hard and forms the cliffs of Red Rock Canyon. Exposure to the elements caused some of the iron-bearing minerals to oxidize. This oxidizing process can be more easily thought of as a "rusting of the sand," which resulted in red, orange and tan colored rocks.

Photo: Up a Hill by Jeff Yost

The Changing Landscape

Looking out over the scenery, the colorful mountains of Red Rock Canyon convey a permanence we can hardly comprehend.

On the contrary, the National Conservation Area is dynamic and has changed dramatically over time. The proof of these changes is evident in the landscape before you.

In the distant past, Red Rock Canyon was deep underwater. As the inhabitants of those waters died, they sunk to the muddy ocean floor and gradually solidified to stone. A variety of different creatures inhabited the seas as they rose and fell and over time the different environments left behind horizontal rock layers of varying colors and textures. The story of these ancient oceans is still told on the horizon; in the grey, layered limestone mountains.

A vast, Sahara-like desert also once covered Red Rock Canyon. The climate created sand into dunes so great that they eventually solidified; forming the Calico Hills and the striped escarpment. Water seeped slowly through the sandstone to create its brilliant colors: when liquid found iron, the stone rusted red. When water pulled minerals

away from the hills, they turned shades of white. Ancient winds also shaped the sand, creating distinct ripples, patterns and shapes still found today.

Currently, there is no ocean shaping the canyon and no vast sand dunes approaching. Instead, the force shaping today's Red Rock Canyon is erosion. Intense, localized rainstorms scour the bare earth, washing away boulders and opening canyons and washes.

Even the climate of the Mojave Desert is shaped by its landforms. Red Rock Canyon is part of the Great Basin, a vast range of alternating mountains and valleys. In a process called the rainshadow effect, these tall, frequent peaks often prevent rain-laden clouds from reaching Las Vegas, leaving the area hot and dry.

Evidence of Red Rock Canyon's illustrious past is everywhere and there are many chances to experience its history up-close. Explore the trails mentioned in this newspaper, or ask at the visitor center for more detailed information on the area.

SMYC Trail

With all the trails available at Red Rock it's hard to choose one to write about. Since SMYC is often overlooked, I thought why not try it on a breezy, beautiful afternoon.

As I walked through the gravel and around the old, twisted trees of the wash, the wind felt just right and the clouds kept the sun from getting too hot on my head. A great day for a hike.

When I started onto the red dirt trail (just like in the Grand Canyon), the gradual elevation started. I enjoyed the increased tickle of wind as I wound my way higher. Three hundred feet isn't a lot of elevation but I found it invigorating. Along the way, I snapped a few shots of blooming flowers, amazed at how still everything was. The purple cacti surprised me the most. I didn't expect to see so much of it. No blooms yet, but I expect great things as spring unfolds.

The looming mountain took up a lot of attention as I wondered, "Was it limestone or granite?" I can never remember the difference.

An added treat—a trickle of water winding parallel to the dusty red path. The trees below hid this mysterious tinkling and with no human in sight, no cars zooming past I felt like I stepped back in time.



Photo: View of SMYC Hike by Jim Boone

While there are certainly more challenging trails, SMYC's just the right amount of hiking for a pleasant workout.

Hopefully you'll get on out there to enjoy it, too. With the spring weather visiting us you have no excuse. And if you're directionally challenged or happen to take the trail backwards and miss the sign

like I did— enjoy the extra walk.

It's worth it.

This article was written by volunteer Andrea Dennin after a hike in February 2009.

Fees and Annual Passes

Red Rock Canyon National Conservation Area began collecting fees in 1998. America the Beautiful Pass, which replaced the National Parks Pass, Golden Age, Golden Access and Golden Eagle began sales in 2007. Below is a list of all passes that are available at the Red Rock Canyon entrance station:

- ◆ **DAILY FEE - \$5**
Daily pass for Red Rock Canyon National Conservation Area. Does not include overnight stays in the developed campground.
- ◆ **RED ROCK ANNUAL PASS - \$20**
Yearly pass for Red Rock Canyon National Conservation Area. Does not include overnight stays in the developed campground.
- ◆ **AMERICA THE BEAUTIFUL PASS - \$80**
The America the Beautiful pass is an interagency pass that will be honored by the National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Land Management and Bureau of Reclamation.
- ◆ **AMERICA THE BEAUTIFUL SENIOR PASS - \$10 one time fee**
Lifetime pass for U.S. citizens who are 62 and older to national parks, U.S. Fish and Wildlife Service National Wildlife Refuges, U.S. Forest Service, Bureau of Reclamation and Bureau of Land Management sites. Pass provides 50 percent discount on campground fees.
- ◆ **AMERICA THE BEAUTIFUL ACCESS PASS - FREE (obtain from ranger at the visitor center)**
Lifetime pass for U.S. citizens with a permanent disability to national U.S. Fish and Wildlife Service National Wildlife Refuges, U.S. Forest Service, Bureau of Reclamation and Bureau of Land Management sites. Pass provides 50 percent discount on campground fees.



Photo: Stormy Morning by Nathan Gouglas



Bureau of Land Management

THE BUREAU OF LAND MANAGEMENT (BLM), AN AGENCY WITHIN THE U.S. DEPARTMENT OF THE INTERIOR, ADMINISTERS APPROXIMATELY ONE-EIGHTH OF THE LAND IN THE UNITED STATES.

Most of these public lands are located in 12 western states. The agency manages a wide variety of resources on these lands including energy and minerals; timber; wild horse and burro populations; fish and wildlife habitat; wilderness areas; and archaeological, paleontological and historical sites.

Vast and varied, these lands offer outdoor enthusiasts unparalleled recreational opportunities and for others, these special places are a sanctuary for rest and solitude. As managers and stewards, the mission of the Bureau of Land Management is to sustain the health,

diversity and productivity of these public lands for the use and enjoyment of present and future generations.

Red Rock Canyon National Conservation Area is a part of the BLM's National Landscape Conservation System: a diverse program that incorporates National Scenic and Historic Trails, Wild and Scenic Rivers, Wilderness Areas, and National Monuments and Conservation Areas, to name a few. The mission of the Conservation System is to conserve, protect and restore nationally significant landscapes that have outstanding cultural, ecological and scientific values for present and future generations of Americans. This 27 million acre

Conservation System is said to be the most innovative U.S. land-management program in the last 50 years, joining together the crown jewels of the BLM's cultural, natural and scientific assets.

FOR INFORMATION ON THESE AREAS AND A COMPLETE LIST OF NATIONAL CONSERVATION AREAS AND TO LEARN MORE ABOUT BLM MANAGED PUBLIC LAND, VISIT OUR WEBSITE AT: WWW.BLM.GOV. TO LEARN MORE ABOUT RED ROCK CANYON, VISIT OUR WEBSITE AT: WWW.NV.BLM.GOV/REDROCKCANYON.

FRIENDS OF RED ROCK CANYON – Making a Difference for 25 years

THE MISSION OF THE FRIENDS OF RED ROCK CANYON IS THE PROTECTION AND ENRICHMENT OF RED ROCK CANYON NATIONAL CONSERVATION AREA AND THE PUBLIC LANDS OF SOUTHERN NEVADA.

Friends, a volunteer-driven membership organization, was founded 25 years ago and has been an active partner of the Bureau of Land Management since 1984. *Friends* is a non-profit 501 (3)(c) organization with members in twenty three states and four countries.

Through the continuing commitment of members and volunteers, *Friends* this past year contributed more than 18,100 volunteer hours and more than \$105,000 in financial support which directly benefits Red Rock Canyon National Conservation Area. Our volunteer members are involved in a wide variety of important

activities to protect and preserve Red Rock Canyon such as: graffiti removal, trails improvement and restoration, native plant propagation and elimination of invasive plant species, volunteer event management, providing visitor information and personal contact as well as trash removal.

Friends members and volunteers are happy to partner with the Bureau of Land Management to assure your visit is safe and educational, and that you leave with a sincere appreciation for this unique National Conservation Area.

TO JOIN OR LEARN MORE ABOUT FRIENDS OF RED ROCK CANYON VISIT WWW.FRIENDSOFREDROCKCANYON.ORG



Red Rock Canyon Interpretive Association

THE MISSION OF RED ROCK CANYON INTERPRETIVE ASSOCIATION (THE INTERPRETIVE ASSOCIATION) IS TO ENHANCE THE RECREATIONAL, EDUCATIONAL AND INTERPRETIVE PROGRAMS OF THE BUREAU OF LAND MANAGEMENT (BLM) BY PROVIDING MATERIALS AND SERVICES THAT PROMOTE AN UNDERSTANDING AND APPRECIATION OF THE NATURAL HISTORY, CULTURAL HISTORY, AND SCIENCES OF RED ROCK CANYON NATIONAL CONSERVATION AREA.

The Interpretive Association was founded in 1988, at the request of the BLM, to provide fund-raising capabilities for the support of outreach programs. The organization began with two employees operating a tiny retail space at the visitor center. Today, The Interpretive Association has more than 50 employees serving three federal agencies.

Leading interpretive hikes and programs, managing the scenic drive wayside sign project, operating the Red Rock Canyon Gift and Book Store, administering the fee

collection program and offering the highly successful "Desert Fossils" interpretive program for local seniors are some of the services provided by The Interpretive Association.

The Interpretive Association continues to increase its commitment to the BLM by facilitating special projects such as Red Springs restoration and creating new exhibits for the visitor center. The Interpretive Association also coordinates the award winning Mojave Max desert tortoise education program.

TO LEARN MORE ABOUT RED ROCK CANYON INTERPRETIVE ASSOCIATION VISIT OUR WEBSITE: WWW.REDROCKCANYONV.LV.ORG.

The Interpretive Association is a nonprofit 501(c)(3) corporation.





Photo: Desert Big Horn Sheep (*Ovis canadensis nelsoni*) by Alejandro Gallo

Rocking Climbing at Red Rock

WITH MORE THAN 2,000 CLIMBING ROUTES, RED ROCK CANYON NATIONAL CONSERVATION AREA IS ONE OF THE TOP FIVE CLIMBING DESTINATIONS IN THE UNITED STATES.

There are two wilderness areas in the conservation area: Rainbow Mountain Wilderness and La Madre Mountain Wilderness. New, bolted, fixed anchors and/or protection bolts cannot be installed in either wilderness area. All of the major canyons in Red Rock Canyon are in the Rainbow Mountain Wilderness and all of the climbing routes located on White Rock Mountain are within the La Madre Mountain Wilderness.

RAIN, RAIN GO AWAY

The sandstone becomes very brittle when it rains and should not be climbed for at least 24 hours. By allowing the sandstone to dry out, hand and footholds will not be broken and gear will be less likely to pull out during a fall. If it rains during your visit to Red Rock Canyon and the sandstone is unclimbable, consider the limestone sport crags that are found in Red Rock and other climbing sites around Las Vegas.

TO OBTAIN A PERMIT, CALL 702-515-5050. You may call up to seven days in advance or as late as the day of your climb. If your message is not clear, you will not receive a permit and you may receive a citation. Same-day permits are not issued after 4:30 p.m. For your safety and to receive a permit, the following information must be included in your message:

- NAME AND ADDRESS
- TYPE OF PERMIT, LE OR ON, AND CLIMBING DATE(S)
- VEHICLE PLATE NUMBER AND STATE
- VEHICLE DESCRIPTION
- CLIMBING DESTINATION AND WHERE YOU WILL PARK
- EMERGENCY CONTACT NAME AND PHONE NUMBER

Additional information on limestone climbing and the classic crags of Red Rock is available at the visitor center. For more detailed information on specific climbs, contact the climbing rangers at (702) 515-5138.

CLIMBING PERMITS

◆ Late Exit permits (LE) provide an additional three hours of climbing time after the normal closure of the scenic drive. These permits are for multi-pitch routes and are only available for the following areas: Angel Food Wall, Ice Box Canyon, Juniper Canyon, Pine Creek Canyon and Oak Creek Canyon.

◆ Overnight permits (ON) are only available for routes on the following walls: Mt. Wilson (1-2 nights), Levitation Wall (1 night), Rainbow Wall (1-2 nights), Buffalo Wall (1-3 nights), Hidden Wall (1-3 nights) and Bridge Mountain (1 night). Camping is not permitted at the base of any route.

Petroglyphs and Pictographs

AS YOU HIKE THE TRAILS AND EXPLORE RED ROCK CANYON, YOU MAY SEE IMAGES CARVED OR PAINTED ON THE CANYON WALLS OR ON BOULDERS ALONG THE ESCARPMENT. THESE IMAGES ARE CALLED PETROGLYPHS AND PICTOGRAPHS AND SOME OF THEM MAY BE THOUSANDS OF YEARS OLD. THE PRIMARY DIFFERENCE BETWEEN THE TYPES, AS DESCRIBED BY ARCHEOLOGISTS, IS THE MANNER IN WHICH THEY WERE CREATED.

Petroglyphs were pecked (scraped and ground) onto the surface of the rock. Usually the dark layer that covers the rock, called the patina or varnish, was broken away to allow the lighter unweathered rock to show through. Artists also used non-varnished rock, soft sedimentary rocks where elements were cut or incised. The reasons for selecting unvarnished rocks are unknown, but these types of petroglyphs are often found in association with rock shelters.

Pictographs, or paintings and drawings on rocks, are less common since these images have a greater likelihood of fading or weathering away. The paint used for pictographs consisted of pigment, a binder and a vehicle. The pigment was the paint's color. In the Southwest, red, white, orange and black are the most common colors, but other colors such as blue, green, purple and pink occasionally occur.

Unfortunately, no detailed studies of paint composition have taken place; indeed, few have been completed elsewhere. Consequently, the materials used for binding also are largely

unknown. Without compositional studies the answers to these questions will remain a mystery.

Pictographs and petroglyphs are a fragile part of the past and are easily damaged. Because we know very little about the composition of the paints, preservation is critical. The numbers of pictographs are decreasing each year, spurring the need for their study and conservation. To keep petroglyphs and pictographs pristine, please do not touch the rock art because contact with the oils in skin will damage them. Freely take photographs and make sketches, but rubbings are forbidden. Individuals witnessing vandalism are urged to report their observations to the BLM at the visitor center. Provide a description of the individuals and their license plate number, if possible. All of us share a concern for protecting these cultural resources, and we here in southern Nevada can be proud of having one of the most successful public programs for fostering the preservation of rock art sites.



Photo: Desert Four O'Clock (*Mirabilis foebellii*) by Kate Sorom

Hiking Trail Descriptions

TRAIL NAME	LEVELS OF DIFFICULTY AND GAIN	APPROXIMATE ROUND-TRIP TIME AND DISTANCE
1. MOENKOPI	Easy 300 ft [90 m]	1.5 hours • 2 mi [3.2 km]
This trail starts to the west of the visitor center near a weather station. It offers panoramic views of the Calico Hills, the Spring Mountains and La Madre Mountains.		
2. CALICO HILLS	Easy - Moderate 400 ft [120 m]	1.5 - 3.5 hours • 2 - 6 mi [3.2-9.6km]
This trail can be accessed by parking at either Calico I, Calico II or near the entrance station. This trail offers access to sport climbing areas and the best close-up views of the Calico Hills.		
3. CALICO TANKS	Moderate 450 ft [140 m]	2 hours • 2.5 mi [4 km]
This trail starts at the Sandstone Quarry parking lot. It winds through a wash and there may be seasonal water present in a natural tank [tinaja] at the end.		
4. TURTLEHEAD PEAK	Strenuous 2,000 ft [600 m]	3.5 - 4.5 hours • 5 mi [8 km]
This trail starts at the Sandstone Quarry parking lot and follows the shoulder of the peak to the top [6,324 ft / 1,927 m]. The trail is intermittent and composed of loose rock.		
5. KEYSTONE THRUST	Moderate 400 ft [120m]	1.5 hours • 2.2 mi [3.5 km]
This trail is accessed from the upper White Rock Spring parking lot. It takes you to the most significant geologic feature of Red Rock Canyon - the Keystone Thrust.		
6. WHITE ROCK - WILLOW SPRINGS	Easy-Moderate 200 ft [60 m]	2.5 hours • 4.4 mi [7 km]
This trail starts at either the upper White Rock Spring parking lot or at the Willow Springs Picnic Area. Watch for wildlife that rely on these year-round springs.		
7. WHITE ROCK / LA MADRE SPRING LOOP	Moderate 890 ft [270 m]	3.5 hours • 6 mi [9.6 km]
This trail can be started at three places: the upper White Rock Spring parking lot, the Lost Creek Trail parking lot or Willow Springs Picnic Area. The north side of White Rock is one of the best areas for viewing bighorn sheep. You can connect to the La Madre Spring Trail to see a year-round spring.		
8. LOST CREEK - CHILDREN'S DISCOVERY	Easy - Moderate 200 ft [60 m]	55 minutes • 0.75 mi [1.2 km]
This moderately easy trail is a wonderful place to explore because of the variety of plant life and a number of cultural sites. Depending on the season, there may be a waterfall [January - March.] Also look for a pictograph and an agave roasting pit site. [Combination rocky, uneven terrain and boardwalk trail.]		
9. WILLOW SPRINGS LOOP	Easy 200 ft [60 m]	1.25 hours • 1.5 [2.4 km]
This trail can be started at either the Willow Springs Picnic Area or Lost Creek Trail parking lot. The trail passes several pictograph and agave roasting pit sites.		
10. LA MADRE SPRING	Moderate 400 ft [120 m]	2 hours • 3.3 mi [5.2 km]
This trail starts at the Willow Springs Picnic Area. The first segment involves walking up part of the 4x4 Rocky Gap Road. These springs are a good place to watch for wildlife, including desert bighorn sheep.		
11. SMYC	Moderate 300 ft [90 m]	2 hours • 2.2 mi [3.5 km]
This trail can be accessed from either the Lost Creek or Ice Box Canyon trails. It follows the terrain at the base of the escarpment and connects the two trails.		
12. ICE BOX CANYON	Moderate 300 ft [90 m]	2 hours • 2.6 mi [4.1 km]
The parking lot for this trail is at mile 8 on the 13-Mile Scenic Drive. This trail crosses open desert then enters the canyon. Unimproved trails in the canyon require some tricky rock scrambling where there may be seasonal waterfalls [January - March].		
13. DALE'S	Moderate 300 ft [90 m]	2.5 hours • 4.4 mi [7 km]
This trail can be accessed from either the Ice Box Canyon or Pine Creek Canyon trails. It follows the terrain at the base of the escarpment and connects the two trails.		
14. PINE CREEK CANYON	Easy - Moderate 300 ft [90 m]	2 hours • 3 mi [4.8 km]
This trail takes you across the open desert, past an old homestead site and into the canyon. You may find seasonal waterfalls. Unimproved trails in the canyon require some tricky rock scrambling.		
15. FIRE ECOLOGY	Easy 200 ft [60 m]	55 minutes • 0.75 mi [1.2 km]
This trail branches off the Pine Creek Canyon Trail. It is a short, figure eight trail that goes through a stand of Ponderosa Pine where a controlled burn took place.		
16. OAK CREEK CANYON	Easy - Moderate 200 ft [60 m]	1.5 hours • 2 mi [3.2 km]
To access this trailhead, take the Oak Creek turnout from the 13-Mile Scenic Drive onto a dirt road. The trail then heads through open desert to the mouth of the canyon. Unimproved trails lead deeper into the canyon. Oak Creek is also accessible from State Route 159.		
17. ARNIGHT	Moderate 300 ft [90 m]	1.5 hours • 2.4 mi [3.8 km]
This trail can be started at the Oak Creek Canyon parking lot or by hiking the Pine Creek Canyon Trail. It connects the Oak Creek parking lot with the end loop of the Pine Creek Canyon Trail.		
18. KNOLL	Moderate 300 ft [90 m]	2.5 hours • 3.5 mi [5.6 km]
The shortest and easiest way to access this trail is by taking the Oak Creek Canyon Trail. This trail links the upper section of the Arnight Trail with the Oak Creek Canyon Trail, following the base of the escarpment.		
19. FIRST CREEK CANYON	Easy - Moderate 300 ft [90 m]	2 hours • 3 mi [4.8 km]
This trailhead is on State Route 159 [W. Charleston Blvd.] 2.6 miles [4.1 km] southwest of the exit to the 13-Mile Scenic Drive. The trail leads to the mouth of the canyon. Seasonal streams and waterfalls can be found deep in the canyon on unimproved trails [January - March.]		

