



Arches Visitor Guide

The official newspaper
of Arches National Park

2012, No. 1

BY KAREN HENKER

The Heart of the Desert

WATER. THE LACK OF IT DEFINES THE DESERT, and yet evidence of its influence surrounds you at Arches National Park. Water's unequalled power to carve, chisel, and crack solid rock is responsible for wondrous sandstone arches, towers, and other fanciful shapes that ignite the imagination. Cracks filled with trapped rainwater sustain diverse plant life, like the iconic gnarled juniper tree and razor-sharp yucca. Shallow pools called desert potholes teem with microscopic creatures, and could mean the difference between life and death for a thirsty bighorn ewe. There is just enough water here for desert-adapted life forms to survive, but what about non-native species, such as park visitors? Is there enough water to share?

Yes. Arches National Park provides water at the visitor center, campground, and Devils Garden trailhead for visitors to enjoy. When you refill a water bottle at any water faucet in the park, you're getting a clean, fresh, local taste of the desert's most precious resource, and conserving other limited resources – such as fossil fuels and clean air – shared by every creature on Earth.



Thirsty? Refill your water bottles at Devils Garden or the visitor center.

The most obvious "local" natural water source would be the Colorado River, but its rust-red eddies and frothy rapids are most enjoyed by rafters and riparian wildlife. Water for park visitors' use comes from deeply-buried rock layers, where it travels through cracks and gaps in the porous sandstone. Two wells reach far below ground (one over 1,160ft/353.6m deep) to collect this ancient, naturally-filtered source, and underground pipes transport it to sinks, flushing toilets, and drinking faucets throughout the park. Two specially-labeled spigots in front of the visitor

center provide purified water just for drinking. This water has been treated by a reverse osmosis system that removes particles and organic chemicals, making the water extra-soft and remarkably good tasting. The treatment process uses energy and park resources, so please conserve water and do not bathe at these spigots. And when you do fill up, please turn faucets completely off so that none of this precious resource is wasted.

Wisely choosing how your water is packaged can also conserve limited resources. It takes around 50oz/1.5 L of

water, 4.2oz/0.125L of oil, and 0.26lb/20g of greenhouse gases to create just one 16.9oz/0.5L disposable plastic water bottle. In 2011, park visitors recycled an impressive 13,750lbs/6,237.8 kg of these single-use vessels, but how many more went to the landfill? Just as dinosaur fossils give us a glimpse of ancient life, the objects we carelessly throw away could become our civilization's fossil record. Choosing to drink from reusable water bottles, such as those sold in the Arches Visitor Center bookstore, reduces our imprint today and far into the future.

Refilling a reusable bottle at a faucet in the park does more than conserve fuel, water, and landfill space. When you drink park water, a drop of the desert becomes a part of you. It is a way to take Arches National Park home with you, along with memories of your visit, a little sand in your shoes, and photographs of unique and dramatic landscapes. Responsibly sharing water with the juniper, yucca, pothole creatures, bighorn sheep, and countless future visitors is part of the experience at Arches. So fill your cup, say a word of thanks, and enjoy a refreshing gulp of the heart of the desert.

EXPERIENCE YOUR AMERICA

Arches National Park
U.S. Department of the Interior
Moab, UT 84532
PO Box 907
National Park Service



Hours of Operation

Arches is open every day of the year, 24 hours a day. The visitor center is open daily (except December 25th) during the following hours:

Mid-March through October

8:30 A.M. to 6:30 P.M.

November through mid-March

8:00 A.M. to 4:30 P.M. (subject to change)

www.facebook.com/ArchesNationalPark

www.twitter.com/ArchesNPS



Arches Visitor Guide

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information, see the back page.

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Moab, UT 84532

Phone

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Websites

www.nps.gov/arch
www.facebook.com/ArchesNationalPark
www.twitter.com/ArchesNPS
www.flickr.com/ArchesNPS

Cover Photo

Double O Arch

The National Park Service cares for the special places saved by the American people so that all may experience our heritage.

General Information

CAMPING

Overnight camping is only permitted in the campground or with a backcountry permit. Devils Garden Campground has 50 sites and is located 18 miles from the park entrance. Expect the campground to be full daily March through October. Tables and fire rings are provided in each site. Water and flush toilets are available in several locations. Camping fees are \$20 per site per night. Wood gathering and ground fires are prohibited. Wood may be purchased from campground hosts March through October. Two group tent sites are available for eleven people or more: Juniper Basin (up to 55 people) and Canyon Wren (up to 35 people). The group camping fee is \$3 per person per night, with a \$33 per night minimum. No recreational vehicles or trailers are permitted in group sites.

RESERVATIONS

Reservations may be made up to six months in advance. Due to high demand, reservations are recommended prior to arrival at the park, otherwise plan on utilizing other camping options in the Moab area. All campsites at Devils Garden are on a reservation system between March 1st and October 31st. Reservations must be made at least four days and no more than 180 days in advance. To make a reservation online, visit www.recreation.gov. To make a reservation by phone, call (877)444-6777 (Toll Free), (877)833-6777 (TDD) or (518)885-3639(International).

ACCESSIBILITY

Not all park facilities meet mandated standards, but we're working toward increased accessibility. Visitors with mobility impairments can access:

Visitor Center

Ramp and reserved parking.

Restrooms

Throughout the park including the visitor center and Devils Garden.

Campsites

Devils Garden site #4H.

Park Avenue Viewpoint

Paved path with slight slope near end.

Delicate Arch Viewpoint

Hard surface, level.

Balanced Rock Viewpoint

Paved surface, level.

Wolfe Ranch Cabin/Rock Art Panel

Hard surface, level.

BACKPACKING

Arches is a relatively small park, with very few areas far enough from roads to qualify as "backcountry." Outside the developed visitor area there are no designated trails, campsites, or reliable water sources. If you'd like to backpack, consider nearby places like Canyonlands National Park that offer more extensive backcountry opportunities. To backpack at Arches, you must obtain a backcountry permit at the visitor center.



Biking along the scenic drive

TRAVELING WITH PETS

Activities with pets are limited at Arches. Pets are not allowed on hiking trails, at overlooks or anywhere in the backcountry. Pets may accompany visitors in the developed campground, and may be walked in the park along paved roads. Pets must be leashed at all times when outside a vehicle. For your pets' safety, do not leave them in vehicles when outside temperatures are above 65°F as they can die of heat exhaustion. There are three kennels with boarding services in Moab:

Karen's Canine Campground
2781 S. Roberts Rd.
(435) 259-7922

Moab Veterinary Clinic
4575 Spanish Valley Drive
(435) 259-8710

Desert Doggie Daycare
4890 Sunny Acres Lane
(435) 259-4841

Nearby, there are vast public lands that offer great hiking and do allow pets on trails. We recommend you keep your pet on a leash, even on public lands, to avoid uncomfortable encounters with wildlife and prevent resource damage.

EMERGENCY!

Any number of emergencies can occur while you are visiting the park: hiking accidents, medical emergencies or perhaps you have locked your keys in your vehicle. If you have an emergency:

- **Contact a park employee.** Many park rangers are trained emergency medical technicians. Law enforcement rangers can investigate vehicle accidents, handle other police matters, as well as take reports of lost hikers, fires, or other emergencies.
- **Go to the visitor center:** If the building is closed, use the pay phones in front of the building to dial 911 (no coin is needed).
- **Dial 911 on your cellular phone:** You will reach the Grand County Sheriff's Office, who will contact a ranger in the park.



A crowd gathers for sunset at Delicate Arch (photo by Andrew Kuhn)

Park staff are available during visitor center hours or at locations throughout the park to provide orientation information and assistance.

FOUR-WHEEL DRIVE ROUTES

Arches has a limited number of four-wheel drive roads, including the Willow Springs Road that goes west from Balanced Rock to Highway 191. Please check at the visitor center for current road conditions. The Bureau of Land Management (BLM) has many popular 4WD routes offering a wide-range of difficulty.

Where does my money go?

IN 2004, CONGRESS PASSED THE FEDERAL LANDS Recreation Enhancement Act (FLREA), which replaced the Recreational Fee Demonstration Program. Authorized through December 2014, the law allows retention of 80% of fees collected at a site to remain there for repair, maintenance, and facility enhancement related directly to visitor enjoyment, visitor access and health and safety. It also includes interpretation, visitor information, visitor service, visitor needs assessments, and signs; habitat restoration directly related to wildlife-dependent recreation, wildlife observation or photography; and law enforcement related to public use and recreation.

ACTIVITY FEES

Fees charged for the popular ranger-guided Fiery Furnace walks will go directly to supporting the program. The cost is \$10 for adults; \$5 for children five to twelve years old and Senior Pass/Golden Age card holders. Children under five years of age are not permitted on Fiery Furnace walks.



Trails in the Windows Section (above left) and the Devils Garden Picnic Area (above right) are just two locations which have received needed attention in recent years.

INTERAGENCY ACCESS PASS (FREE)

Previously the Golden Access Pass
Lifetime pass for permanently disabled U.S. citizens; entrance to all federal fee areas plus 50 percent discount on some camping, activity fees, and other special user fees. Previously-issued Golden Access Passes will be honored forever by all agencies.

INTERAGENCY ANNUAL PASS (\$80)

Previously the Golden Eagle/National Park Pass
Good for twelve months; available to anyone. Free entrance to Fish and Wildlife Service Refuges and National Park Service areas that charge entrance fees. Covers use of Bureau of Land Management, Bureau of Reclamation, and Forest Service sites that charge Standard Entrance Fees.

INTERAGENCY SENIOR PASS (\$10)

Previously the Golden Age Pass
Lifetime pass for U.S. citizens sixty-two years of age and older; entrance to all federal fee areas plus 50 percent discount on some camping, activity fees, and other special user fees. Previously-issued Golden Age Passes will be honored forever by all agencies.

LOCAL PASS: ARCHES, CANYONLANDS,

Hovenweep and Natural Bridges (\$25)
Good for twelve months; available to anyone; entrance to these four areas only.

This new revenue funded the following improvements at Arches:

- Rehabilitating park trails
- Upgrading roadside restrooms
- Rehabilitating the Devils Garden picnic area
- Enhancing trailheads and scenic pullouts



Hey Kids — This One's For You!

Do you want to explore Arches and help protect the park? Then become a Junior Ranger! Becoming a Junior Ranger is a serious and important task, but it's lots of fun too. Ask at the visitor center how you can get involved. Options

include completing a booklet or checking-out a Red Rock Explorer Pack. It's that simple! You'll earn a badge and certificate, and join the ranks of the many Junior Rangers who help protect this special place.

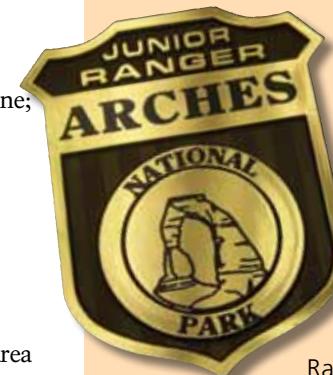


Photo Suggestions

Take home great photos of your Arches experience. Below are some tips for where you might capture that magic moment at both sunrise and sunset.

Early Morning

Moab Fault

The Three Gossips

Sheep Rock

The Great Wall

Turret Arch

The Spectacles

Double Arch

Cache Valley

Wolfe Ranch

Landscape Arch

Double O Arch

Delicate Arch

Viewpoint

Late Afternoon

Park Avenue

Courthouse Towers

Petrified Dunes

Balanced Rock

The Garden of Eden

The Windows

Delicate Arch

Fiery Furnace

Skyline Arch

Fins in Devils Garden

Tower Arch



BY KAREN HENKER

Arches National Park attracts visitors from all over the world. Despite this diversity, most visitors flock to the same four destinations: Balanced Rock, Devils Garden, Delicate Arch, and The Windows. Parking lots at these popular areas frequently overflow with cars during the busy season (March through October). Entrance station lines can stretch almost to the highway, causing long waits and testing visitors' patience before they even cross the threshold.

Arches National Park hopes to pilot a voluntary shuttle system soon to help reduce this congestion; see the park website for more information. In the meantime, here are some ways every visitor can help:

- Relax and allow yourself extra time to reach your destinations. There is plenty of scenery for all to enjoy and the rocks aren't going anywhere – at least, not on a human time-scale.
- Start your day early. Try entering the park before 8:00 a.m. Sunrise is just as beautiful as sunset.
- Consider carpooling. Parking is very limited, so consider leaving extra vehicles, large RVs, or trailers at the hotel, campground, or visitor center parking lot.
- Choose to visit the park during the off-season. Winter is a great time to visit, when light snowfalls accent the red-rock vistas.

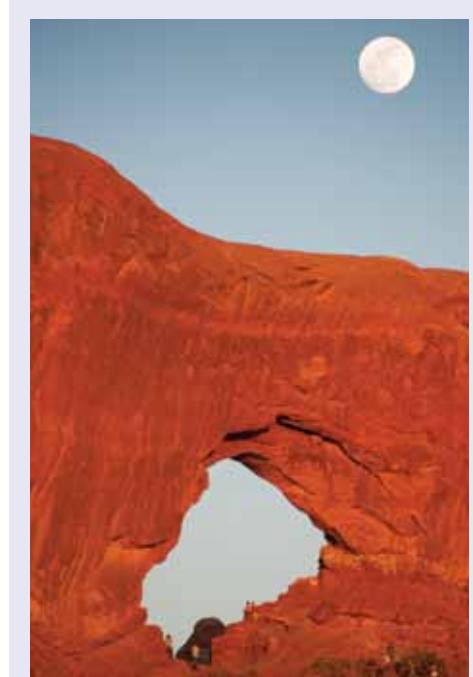
An Extra Note about Parking

Parking lots at Arches are kept small to better preserve the landscapes you came to see. Acceptable parking places include individually

Choose your parking spot wisely: illegally parked cars may be cited.

marked stalls and parking “lanes” along fences, or existing wide spots along the roads. Never park on vegetation or in a manner that blocks traffic, and please don’t hold up the flow of cars by waiting for a parking spot. If there isn’t room at your chosen destination, consider moving to another area and coming back later.

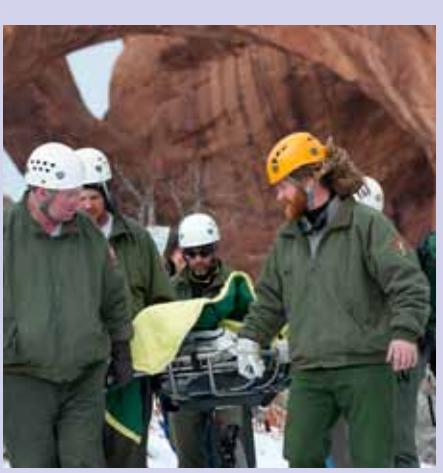
People take vacations to escape the stresses of daily life, but traveling itself can be stressful. Visitors to Arches during the busy season might encounter long lines, jostling crowds, intense heat, and unexpected delays – all of which can make tempers flare. Thankfully, these same visitors will also encounter breath-taking scenery, warm and welcoming park staff, and opportunities to help preserve these timeless landscapes for the enjoyment of others for years to come.



Sunset/moonrise at North Window.



flickr.com/archesnps



Hiking Trails



Balanced Rock

EASY TRAILS

Balanced Rock

Start: Balanced Rock parking area
Length: 0.3 mile (0.5 km) round trip
Time: 15 to 30 minutes

A loop trail at the base of a fragile, picturesque rock formation.

The Windows

Start: Windows parking area
Length: 1 mile (1.6 km) round trip
Time: 30 to 60 minutes

A gentle climb up a gravel loop trail leads to three massive arches (North and South Windows and Turret Arch). An alternate return, slightly longer, is by way of the primitive loop around the back of the two Windows. The primitive loop trail starts at the South Window viewpoint.

Double Arch

Start: Double Arch parking area
Length: 0.5 mile (0.8 km) round trip
Time: 15 to 30 minutes

A relatively flat, sandy trail leads to the base of two giant arch spans which are joined at one end.

Delicate Arch Viewpoint

Start: Delicate Arch Viewpoint Trailhead
Length: 100 yards (91 meters) round trip
Time: 10 to 15 minutes

In addition to the short accessible trail, another (moderately strenuous) hiking trail climbs 0.5 mile (0.8 km) toward Delicate Arch and ends at the rim of a steep canyon that separates the viewpoint from the arch. This is not the popular trail to Delicate Arch, which starts at the Wolfe Ranch parking area.

Sand Dune Arch

Start: Sand Dune Arch parking area
Length: 0.3 mile (0.5 km) round trip
Time: 15 to 30 minutes

Trail leads through deep sand to a secluded arch among sandstone fins. **Do not climb or jump off the arch.**

Broken Arch

Start: Sand Dune Arch parking area or Devils Garden campground across from campsite #40
Length: 1.3 miles (2.1 km) round trip; 2 miles (3.2 km) including the loop
Time: 30 to 60 minutes

From the Sand Dune Arch parking area, the trail crosses a large meadow to the arch and continues to the campground. Trail leads through fins with sand dunes and slickrock.

Be Safe

Each year, park rangers respond to dozens of search or rescue incidents in the park. These frequently involve heat exhaustion, dehydration, climbing or scrambling and improper footwear.

- Always carry and drink water. Even the shortest stroll will make you thirsty on a 100°F (38°C) day. One gallon (4 liters) per person per day is recommended for longer hikes. Water is available **only** at the visitor center and at Devils Garden.
- Wear sturdy shoes with enough tread to give you good traction. Do not hike in smooth-soled shoes or boots. Some trails cover uneven terrain and follow rock ledges.
- Protect your skin with a hat, long-sleeved shirt, and sunscreen. There is little shade in the desert. The sun is intense year round and can easily burn your skin, especially in the summer.
- Slickrock invites adventure. When you climb or scramble, be sure you can retrace your steps, and remember that it is often easier to go up than down. Sandstone is very slippery when wet or covered in snow.
- Sudden thunderstorms with deadly lightning occur here. The distance of lightning can be calculated by counting the time interval between a lightning flash and the subsequent thunderclap. Sound travels about a mile in five seconds, so if the interval is fifteen seconds (or three miles) or less, seek shelter immediately. One of the safer places to be during a thunderstorm is in your vehicle with the windows closed. If you are unable to reach your vehicle, go to a low-lying area. Stay away from open areas, high spots or tall objects (like Delicate Arch), and solitary trees. If your skin tingles or your hair stands on end (signs that a charge is building up), crouch down and place both feet together firmly on the ground.

Hiking Etiquette

- Stay on established trails and/or solid rock: follow the rock cairns. Help protect the fragile biological soil crust and other vegetation in our desert environment.
- Leave no trace: move like a shadow, and carry out garbage, even if it isn't yours.
- Pets and bicycles are **not** permitted on hiking trails.

Skyline Arch

Start: Skyline Arch parking area
Length: 0.4 mile (0.6 km) round trip
Time: 10 to 20 minutes

A short hike on a flat, well-defined trail. On a cold November night in 1940, a large chunk fell out of the arch, instantly doubling the size of its opening.

Landscape Arch

Start: Devils Garden trailhead
Length: 1.6 miles (2.6 km) round trip
Time: 30 to 60 minutes

A relatively flat, gravel-surfaced trail (usually heavily populated with hikers) leads to a spectacular ribbon of rock, whose span is more than a football field in length. Short side trips to Tunnel and Pine Tree Arches. Trail guide available at trailhead.



Fins along the Devils Garden Primitive Loop

Delicate Arch

Start: Wolfe Ranch parking area
Length: 3 miles (4.8 km) round trip
Time: 2 to 3 hours
Elevation change: 480 feet (146 m)

Take at least 2 quarts (2 liters) of water per person. Open slickrock with some exposure to heights and no shade. The first half-mile is a well-defined trail. Upon reaching the slickrock, follow the rock cairns. The trail climbs steadily and levels out toward the top of this rock face. Just before you get to Delicate Arch, the trail traverses a rock ledge for about 200 yards (183 m).

Double O Arch

Start: Devils Garden Trailhead
Length: 4.2 miles (6.8 km) round trip
Time: 2 to 3 hours

Beyond Landscape Arch, the trail becomes more challenging as it climbs over sandstone slabs; footing is rocky; there are narrow ledges with exposure to heights. Spur trails lead to Partition and Navajo Arches. Dark Angel is one-half mile (0.8 km) farther. Trail guide available at trailhead.

MODERATE TRAILS

Park Avenue

Start: Park Avenue parking area
End: Courthouse Towers parking area
Length: 1 mile (1.6 km) one way
Time: 30 to 60 minutes

Elevation change: 320 feet (98 meters)

From Park Avenue parking area, the trail descends steeply into a spectacular canyon and continues down the wash to Courthouse Towers. If you have a shuttle driver, you can begin at one point and be picked up at the other. For round-trip hiking, retrace your steps along the trail rather than walk along the park road.



Rock cairn

STRENUOUS TRAILS

Tower Arch

Start: Klondike Bluffs parking area, via the Salt Valley road
Length: 3.4 miles (5.5 km) round trip
Time: 2 to 3 hours

The trail climbs a steep, short rock wall, cuts across a valley and then meanders through sandstone fins and sand dunes. An alternate, shorter trail (0.3 mile [0.5 km] one way), begins at the end of the four-wheel-drive road on the west side of Tower Arch. This unpaved road washes out quickly in rainstorms; check road conditions before heading out.

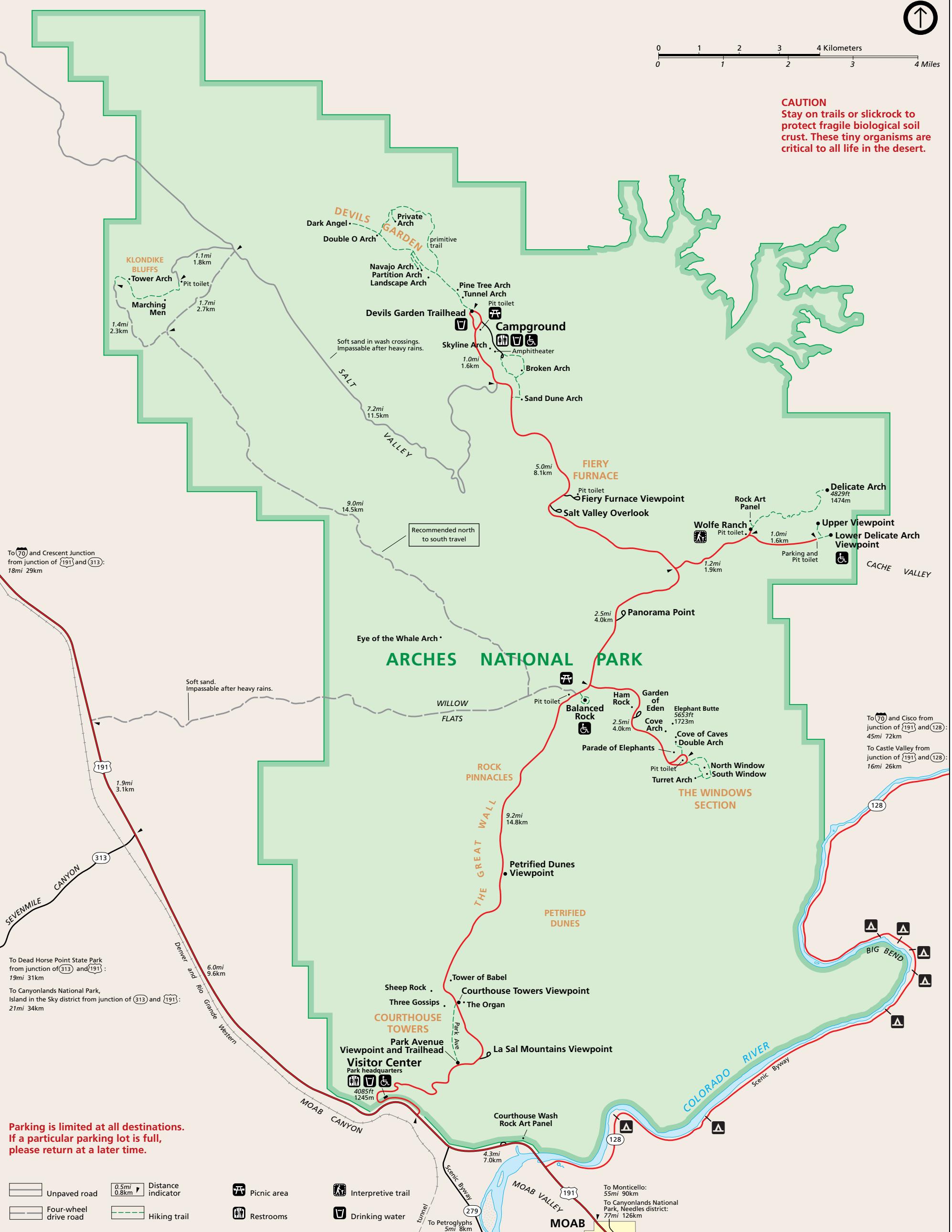
Fiery Furnace (Fee Area)

The Fiery Furnace is a mazelike labyrinth of narrow sandstone canyons. To enter the Fiery Furnace, visitors must accompany a ranger-guided hike (see page 2) or obtain a hiking permit at the visitor center. There is no trail, so visitors are encouraged to accompany a ranger — both for their own safety and to reduce impacts on the area.

North
↑

0 1 2 3 4 Kilometers
0 1 2 3 4 Miles

CAUTION
Stay on trails or slickrock to protect fragile biological soil crust. These tiny organisms are critical to all life in the desert.





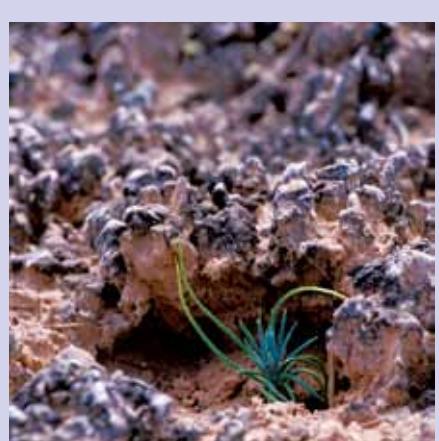
Sighting Sheep

Your best chance to catch a glimpse of bighorn sheep in Arches is the first three miles of the park road. Slow down and find a pull off and watch for them. Another option is to travel the southeastern boundary of the park by driving north along Highway 128 from its junction with Highway 191. Take along a pair of binoculars to look for sheep across the river.

Remember that "Looking for sheep is an exercise in patience," according to nature essayist Peter Steinhart, and "it's usually rhymed with disappointment."

Knowing desert bighorn sheep have a safe place here at Arches National Park and efforts are ongoing to help them survive might help satisfy those who wait in vain.

But, give it a try—persevere in bighorn fashion—this may be your lucky day!



Watch Your Step

Biological soil crusts are a very important part of the park's ecosystem. They prevent soil erosion, absorb and hold water, and provide nutrients to plants. *One footstep can kill hundreds of years of growth.*

Crusts are formed slowly by living organisms and their by-products, creating a fragile surface crust of soil particles bound together by organic material.

Covering nearly all soil surfaces in the desert, biological soil crust is almost invisible at early stages of growth but over time appears lumpy and black.

Please help us protect fragile crusts by walking on designated trails, bare rock or streambeds.

Hope on Hooves

SHORTLY AFTER ENTERING ARCHES NATIONAL Park, a large yellow sign with the image of a bighorn sheep alerts us that for the "next three miles" we might encounter them crossing the road. Seeing sheep in Arches is a treat that only a few visitors experience each year, however. Desert bighorns (*Ovis canadensis nelsoni*) historically ranged in large numbers throughout most of the Colorado Plateau. Today, only a few remain. Life for desert bighorns is tough and they face many challenges that have pushed them close to extinction. The sheep in Arches National Park provide hope that their resilience, combined with our help, will keep them here for many generations to come.

Sheer cliffs, rugged slopes and deep canyons are where bighorns prefer to live, but the rough terrain can work against them, too. Imagine the challenges they face while attempting to outmaneuver a mountain lion or seek a mate. Male sheep, known as rams, commonly travel over 100 miles to find an ewe through an environment where there is very little water, forage, or shelter from predators.

In spite of the harsh conditions, sheep thrived here for thousands of years. Westward expansion in the mid-1800's brought thousands of settlers and new challenges for bighorns. Unregulated hunting, a loss



A bighorn ram near the Arches Visitor Center

of good habitat, and deadly diseases transmitted by domestic sheep reduced the once abundant herds. Sheep disappeared completely in some areas, including Arches National Park, by the early 1900's. In the mid-1980's, a partnership between the state of Utah and the National Park Service reintroduced 25 sheep to Arches from nearby Canyonlands National Park.

The current Arches herd is only around 50 animals. Management and study of the sheep here in Arches will continue in the hope that the bighorns will endure, prosper among their human neighbors, and once again become a stable part of the Arches ecosystem.

Marks on the Land - Links to the Past

BY DEBORAH EHR

EVERY PERSON WHO PASSES through this land makes a mark, leaves a track, or stakes a claim. These marks create a link to the past and allow modern explorers to imagine how the area's 12,000 years of human history has influenced the present.

Groups of Native Americans have traveled through and lived in this area for over 10,000 years. They left behind flakes of chert, which are remnants from stone tool-making. They inscribed on rock walls, creating pictographs (paintings on the rock) and petroglyphs (carvings in the rock). Early ancestral Puebloans wore sandals with raised patterns that left marks on the ground while later groups painted their ceramic pots with elaborate decorations. All of these marks may have helped to link families with the others that would follow. Their stories and culture live on through their descendants.

In 1765, Juan Maria Antonio de Rivera and his company left their mark by becoming the first Euro-Americans to cross the Colorado River at what later became Moab. The efforts of these Spanish explorers led to the lucrative trade route that later became the "Old Spanish Trail". Nicknamed the longest, crookedest, most ornery pack trail in the history of the United States, this part of Utah was one of the few places to get around impassable canyons. Only sections of the full 1,121 mile trail can be retraced, but part of it



Esther and Ferol Stanley, part of John Wesley Wolfe's extended family, at Wolfe's Ranch

is believed to pass through Arches National Park just north of the Visitor Center.

In the 1850's, waves of settlers from the east began adding their mark. Ranchers tamed the harsh landscape to raise cattle and sheep. John Wesley Wolfe was one such homesteader who set down roots in the future park. His family joined him from Ohio in 1906, and they built a new cabin with a wooden floor, complete with fine china ordered from the Sears Catalog.

Later, others arrived seeking mineral riches, especially valuable uranium. While the inhospitable desert took its claim on many of the prospectors, some struck it rich. Roads, mine shafts, and tailings are the marks they left behind. Other miners found different value in the landscape, like Alexander Ringhoffer who helped create Arches National Monument in 1929.

Today, travelers occasionally leave a different kind of mark. Artifacts that tell the stories of the past are disappearing. Rock art and historic signatures are defaced by new marks, like graffiti. Pieces of the past are lost. Fortunately, national parks are places where this priceless history is preserved and protected.

For hundreds of years, humans have left their indelible mark on this area.

Now, humans take the stage

as preservers. The National Park Service protects these places and shares their stories so that each of us can make a connection to our past. How will your mark shape the future of this landscape?

Make your mark a positive one. National parks protect the irreplaceable evidence of the past.

Be a caretaker:

- Preserve your heritage. Do not enter, alter, or deface historical sites. Leave artifacts undisturbed. (It is illegal to remove them.)

Explore Arches' past:

- See rock art near the Delicate Arch trailhead and lower Courthouse Wash.
- Ask for information about the Old Spanish Trail at the Visitor Center.
- Visit the Wolfe family's cabin near the Delicate Arch trailhead

Nature's Art

ARCHE'S NATIONAL PARK IS A VIBRANT, LIVING museum where works of art are displayed, preserved and protected. Some of the displays you might find include tapestries, mosaics and jewels. As you travel through the museum, see what catches your eye.

Look closely at the towers of rock in the park and you will discover the beautiful "tapestries" that adorn these walls. Like tapestries in museums, nature's tapestries document historical events. Surprisingly, the thread that holds much of the park's tapestry together is iron. The red "thread" visible in the rock layers is due to "rusting" or oxidizing of iron.

Whitish to yellowish-tan threads are the result of

an accumulation of organic acids dissolving the iron and bleaching the rock. Ribbons of turquoise-colored threads run through the tapestry at Wolfe Ranch. This unique blue-green layer was created when volcanic ash settled into a large alkaline lake - an environment with little oxygen. Time can change the design and the story.

Look from the walls down to the floor, and enjoy the covering of "mosaic tiles" in the

form of biological soil crusts on the museum's foundation. These living crusts are composed of cyanobacteria, lichens, mosses, microfungi, bacteria and green algae. When they are young, crusts can be invisible to the naked

eye. They also absorb water and increase the nutrients that plants need to survive. Intact biological soil crusts provide a strong foundation for the whole park's ecosystem. This work of art is fragile. Mind the "velvet ropes" and stay on the path.



The night sky at Balanced Rock (photo ©Manish Mamta)

eye, but after time and frost heaving have been at work and new organisms join in, they appear dark and bumpy and have an antiqued appearance, reflective of their mature age up to 600 years old.

The "tiles" of this mosaic are attractive when viewed individually, but the real beauty lies in the "big picture" they create. Working together, these biological soil crusts stick to grains of sand and literally hold the ground

in place. At night, the overhead lighting is turned off and the vault is opened. The prized jewels are displayed in the sky in the form of planets, stars and the Milky Way. It is a constant struggle to keep these valuables in Arches' gallery because they are so fragile. Each decision the park and the local community makes about outdoor lighting affects their future. It's a big responsibility for each and every one of us to ensure that these jewels remain for all to see.

These are only a few of the awe-inspiring displays in Arches National Park. The park is a perfect gallery to house nature's amazing works of art. Long after your visit to the park, you can know that the treasures you enjoyed are safeguarded - a lasting legacy for future generations.

A Shining Example

"In any land what is more glorious than sunlight! Even here in the desert, where it falls fierce and hot as a rain of meteors, it is the one supreme beauty to which all things pay allegiance."

Late 19th century author John C. Van Dyke

VISITORS TYPICALLY DESCRIBE THEIR DEVILS GARDEN CAMPGROUND experience as "amazing," "tremendous," and "spectacular." Fifty campsites are nestled among distinct sandstone formations and desert vegetation – trademarks of Arches National Park. Encounters with wildlife, night skies flooded with stars, and quiet campfire gatherings are among the experiences that make the campground such a special place. Not long ago, campers also experienced the constant droning of diesel generators intruding on their tranquility.

The generator noise impeded our mission to preserve "unimpaired the natural and cultural resources and values" of this special place. Equally disturbing were the engine exhaust (a byproduct of the generators running 24 hours each day) as well as the price tag of \$20,000 a year in operating costs and many hours of staff maintenance. The park needed a better way to provide power to the campground, and after years of study and research we finally saw the light...

...of the sun! In 1995, the NPS (in partnership with the state of Utah) installed a photovoltaic/diesel hybrid electrical system for the campground. Photovoltaic technology – also called solar power – harvests clean energy from the sun and stores it in batteries. Currently, 95 percent of the campground's electrical needs are captured from the sun, and the generators only run if the PV system



Solar panels in the Devils Garden Campground (photo by Andrew Kuhn)

fails or on a rare cloudy day in the desert. Noise has diminished, air quality improved, and the money saved can fund other projects that improve visitor experiences.

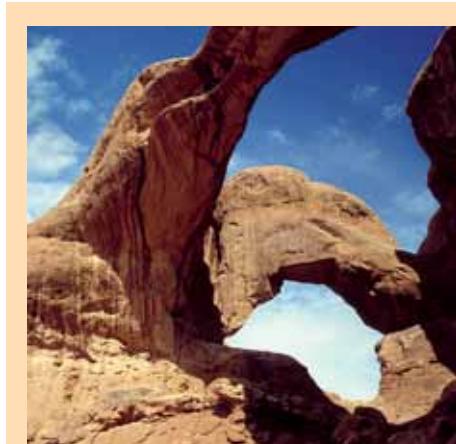
Thanks to a productive partnership, wise management decisions, and implementation of new technologies, the constant whirring of diesel engines and their choking exhaust are no longer part of the Arches camping experience. So breathe deep and enjoy the serenity.

BY ALICIA LAFEVER

Preserving Dark Skies

National parks preserve some of the darkest skies in the country. To find the darkest parks and document the widespread effects of light pollution, the National Park Service created the Night Sky Team. This team completes light surveys to identify areas parks can minimize their contribution to the light pollution problem.

In the survey of Arches, and neighboring National Park Service areas like Canyonlands, Natural Bridges and Hovenweep, several light impacts were identified. In 2010, the park began replacing exterior light fixtures and bulbs to reduce energy consumption and preserve the night sky. To discover more about how national parks are protecting the night sky visit: <http://www.nature.nps.gov/air/lightscapes/>.



What's in a Name?

Arches National Park contains the largest concentration of natural stone arches in the world – more than 2,500 at last count. Yet what is an arch? Is it the same as a bridge? How about a window? If you've asked these questions, you're in good company.

To qualify as an official stone "arch," a hole must have an opening at least three feet (1m) long in any one direction. There is no requirement for width, though; quite a lot of the arches in the park are so skinny you have to place your cheek up against the rock in order to see any light through them.

A natural bridge is formed by running water and spans either a present or former waterway. Very few natural bridges exist at Arches, but Natural Bridges National Monument just two hours south (112 miles) has three tremendous examples of this feature. All of them are visible from their paved scenic road or by hiking trail.

Is a window a special kind of arch? Not really. "Window" is just a descriptive term that is often given to rock openings high on a rock wall or fin. Some arches are called windows if they "frame" a particularly good view of the landscape beyond.

Arch, bridge, window...or hoodoo, spire, tower...these are all descriptive names given to sandstone features visible in the park and elsewhere in the southwest. Whatever you call them, shapes in the rock possess great power to capture the human imagination. What names might your imagination suggest?

Time flies! Use it well

HAVE A LIMITED TIME TO EXPLORE ARCHES? HERE ARE SOME SUGGESTIONS to help you make the most of your visit, even if it is brief.

IF YOU LIKE TO HIKE

Time allocations are based on an average hiking speed of two miles per hour, and include time to drive to the trailheads. (Time spent marvelling and contemplating the majestic wonders and sights varies greatly and is not included here.) Add time to take in the scenery from roadside pullouts between destinations.

In 2 hours, you can do one of these 4 routes:

- Hike the Windows loop trail and get an up-close view of the North and South Windows and Turret Arch. Then take the short trail between parking areas and hike up to Double Arch. Drive back to Balanced Rock and take the loop trail around its base. Consider its precarious position as you walk beneath it.
- Take the Delicate Arch Trail from Wolfe Ranch up the sloping slickrock to stand under the best known arch in the world. (During hot months, do this hike early or late in the day.)
- Hike between the tall sandstone fins in the Devils Garden to see Landscape Arch, perhaps the world's longest. How long will this thin span resist the forces of gravity?
- Walk to Sand Dune Arch, across the grassy field and onward to Broken Arch. Continue around the loop, through the end of the campground, and return. Enjoy the vista toward the distant Book Cliffs, Tapestry Arch and the sandstone fins.

In half a day, take one of these three hikes:

- Hike the entire Devils Garden Trail, all the way out to the spire called Dark Angel. When you return, take the primitive loop.

- Take the moderately strenuous ranger-guided hike through the Fiery Furnace. Make a reservation online at least four days in advance (see page 2).
- If you don't mind driving the rough and often "washboard" road to the remote island of rock known as Klondike Bluffs, hike the primitive trail to Tower Arch.

If you have a *whole day* or more, combine the above hikes to fill the time you have.

IF YOU LIKE TO TOUR BY CAR

If you have 1½ hours:

- Drive to the Windows Section and see some of the park's largest arches. (Add one-half hour to stroll beneath either North Window or Double Arch.)
- Drive to the Delicate Arch Viewpoint and see the world's most famous arch, a mile distant. Stop at Wolfe Ranch on your way back and imagine what it would have been like to homestead this relatively barren area in the late 1800s.

If you have 3 hours:

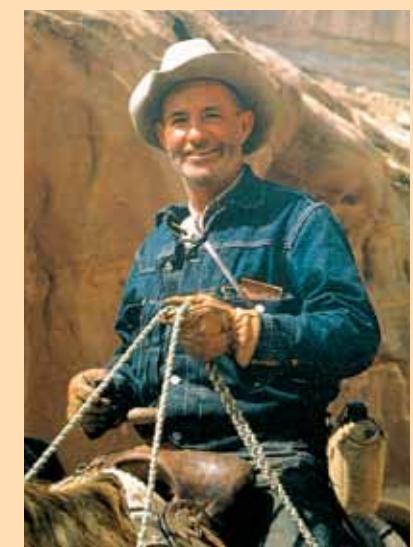
Do both drives listed above (or you can do one drive, spending ten minutes at each viewpoint along the way).

If you have 4½ hours:

You can drive all of the paved park roads, spending ten minutes at each viewpoint, and take quick drives to the Windows Section, Wolfe Ranch, and Delicate Arch Viewpoint.

Can't decide?

Well, forget the schedule and stay another day!



Friends of Arches and the Canyonlands Parks

The Friends of Arches and the Canyonlands Parks: Bates Wilson Legacy Fund provides direct support to Arches and Canyonlands National Parks and to Natural Bridges and Hovenweep National Monuments in order to enhance existing projects in these spectacular areas to conserve the land and its cultural treasures for present and future generations to enjoy.

This mission honors the legendary work of Superintendent Bates Wilson. Bates came to Arches in 1949, inspiring and leading the effort that resulted in Canyonlands National Park being established in 1964. He is regarded by many as the "Father of Canyonlands."

Bates Wilson firmly believed that:

- The **park visitor** must have a great experience;
- **Exploratory and educational** opportunities must abound;
- **Preservation** is our obligation to future generations;
- **Youth** indeed are the future: Bates enhanced the lives of countless young people as they explored and learned to appreciate the parks with him.

Go to www.bateswilson.org to learn more or mail a check made out to *Friends of Arches and the Canyonlands Parks/CNHA* to:

Friends of Arches and the Canyonlands Parks
c/o CNHA
PO Box 1680
Moab, Utah 84532.

Thanks!



How do I get to Arches National Park?

Arches National Park is located in southeast Utah.

- 5 miles north of Moab
- 110 miles southwest of Grand Junction, Colorado
- 236 miles south of Salt Lake City, Utah
- 360 miles southwest of Denver, Colorado
- 350 miles north of Grand Canyon National Park's South Rim

Commercial airlines serve Grand Junction, Moab and Salt Lake City.

Nationwide bus service is available to Green River, Utah (50 miles from Moab) and Grand Junction.

For additional information on transportation arrangements, contact:

Grand County Travel Council
P.O. Box 550
Moab, UT 84532
(800) 635-MOAB
www.discovermoab.com

Weather Information

	Temperature (degrees Fahrenheit)						Precipitation (inches)	
	Average High	Average Low	Max High	Max Low	Days above 100	Days below 32	Average	% of Annual
January	44	22	63	-1	0	28	0.6	7
February	52	28	73	9	0	22	0.7	8
March	64	35	87	13	0	10	0.8	9
April	71	42	93	25	0	3	0.8	9
May	82	51	105	33	1	0	0.8	9
June	93	60	110	43	6	0	0.5	5
July	100	67	116	51	16	0	0.7	8
August	97	66	109	44	12	0	0.8	9
September	88	55	105	36	1	0	0.9	10
October	74	42	106	23	0	2	1.0	13
November	56	30	79	12	0	18	0.6	7
December	45	23	69	5	0	26	0.4	5

CANYONLANDS NATURAL HISTORY ASSOCIATION (CNHA)
sells hundreds of items about Arches National Park and the rest of Utah's canyon country.

Visit their outlets in the **Arches Visitor Center** and the **Moab Information Center** (corner of Center & Main in Moab).



CNHA
3015 S. Highway 191
Moab, Utah 84532
(800)840-8978 (toll free)
(435)259-6003
www.cnha.org

facebook.com/moabcnha
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