



# Arches Visitor Guide



The official newspaper  
of Arches National Park

2014, No. 1

Bring this paper to  
the visitor center  
desk for travel tips,  
or see back page!

## Make Memories & Leave No Trace

MY EYES STARE IN WONDER, MY BREATH grows deeper and I can't seem to stop taking pictures. Where I live, the views are not as vast, the colors not as vibrant, the air not as fresh, and the skyline not formed by magnificent rock towers. I have come to a national park: a place of such significance it was deemed worthy of special protection. Arches National Park was created to protect "gigantic arches, natural bridges, 'windows', spires, balanced rocks, and other unique wind-worn sandstone formations, for the preservation of which is desirable because of their educational and scenic value." I have traveled far for this experience.

As I marvel at this extraordinary landscape, I notice something out of place: someone has "tagged" the rock with their name. I think, "Graffiti? In a national park?" And then I remember: over one million people visit Arches every year. Many may not know that in a national park and on other public lands, graffiti is vandalism. Graffiti can be words or shapes drawn, carved, scratched, or painted on the surface of rocks or other features no matter how small or superficially drawn. It can be expressions



Examples of graffiti and park staff working hard to remove it.

of love, tic-tac-toe games, offensive drawings, names, initials, or dates.

Leaving a mark is in our nature. Here in the park and across the Colorado Plateau, Native Americans, settlers and cowboys all left signs of their presence. These marks are part of our history, dating back hundreds of years. But the world

is a different place now: there are more people, more development, and we have chosen to protect these places of beauty and history for the future. Today, graffiti is prohibited by law.

Yet, graffiti appears throughout the park: under arches, on boulders, atop fins – even across ancient petroglyphs. It

is a problem that is widespread in many national parks. The process of removing graffiti takes time, care, and a lot of hard work.

Luckily though, I know that graffiti is easily prevented and there are many other ways we can mark our journey here: a spectacular photo, an unforgettable hike, a quiet moment of reflection. When I think about the National Park Service mission,

*"to preserve unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations"*

I am inspired. We can all do our part to achieve this mission. I invite you to join me in protecting Arches National Park by not leaving your mark. Make memories, take photos...and leave no trace.

BY PATRICIA ORTIZ

EXPERIENCE YOUR AMERICA

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



### Stay Connected

Share your park experiences with us and our growing online community:

facebook.com/ArchesNationalPark

twitter.com/ArchesNPS

flickr.com/ArchesNPS

youtube.com/ArchesNPS

# General Information

## Hours of Operation

The park is always open, 24 hours a day. The visitor center is open daily from 9 a.m. to 4 p.m., with extended hours mid-March through October. The visitor center is closed on December 25th.

## RANGER-GUIDED ACTIVITIES

Evening Programs are offered most nights per week, spring through fall, at the Devils Garden Campground Amphitheater. Check at the visitor center for times and topics.

Guided Walks are offered most days per week, spring through fall, at various locations in the park. Routes follow easy or moderate trails up to 1 mile in length. Check at the visitor center for times and locations.

Fiery Furnace Walks are offered daily, spring through fall. These moderately strenuous, three hour hikes wind through terrain that requires scrambling up and through narrow cracks and along narrow ledges above drop-offs. Children under five are not permitted. Reservations may be made at [www.recreation.gov](http://www.recreation.gov) and must be made more than four days before the date of the hike. Walks are limited to 25 people and typically fill weeks in advance. Reservation holders must check in at the visitor center at least one hour before their hike.



## 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 \$3per person per night, with a \$33 per night minimum. No recreational vehicles or trailers are permitted in group sites.



## CAMPING RESERVATIONS

All campsites in Devils Garden can be reserved between March 1 and October 31st. Reservations must be made at least four days in advance. Due to high demand, reservations are strongly recommended prior to arrival at the park. If you have no reservations, plan to use other camping options outside the park. To reserve a campsite, visit [www.recreation.gov](http://www.recreation.gov) or call (877)444-6777 (toll free), (877)-833-6777 (TDD), or (518)885-3639 (international).



## BACKPACKING

Arches has few areas that qualify as “backcountry”. Outside the developed visitor area there are no designated trails, campsites or reliable water sources. To backpack at Arches, you must obtain a backpacking permit inside the visitor center and camp at least 1 mile from roads and 1/2 mile from trails. Or, consider backpacking at nearby places like Canyonlands National Park that offer more extensive backcountry opportunities.



## CLIMBING & CANYONEERING

It is your responsibility to know and follow all climbing & canyoneering regulations, route closures and group size limits. Obtain day-use permits and route information at the kiosk located in the visitor center plaza or on the park website. Climbing of any type is prohibited on all arches and prominent features. Slacklining is always prohibited. Travel only on designated trails, rock or sandy washes to protect soil crust and practice Leave No Trace ethics. Most routes require advanced skills; assess your abilities and risks appropriately. Plan well and be prepared for self-rescue.



## BIKING

Bikes are permitted only on roads, not on hiking trails or off-road. Ride single file, and be attentive to passing cars and recreational vehicles that may not be aware of cyclists. On the paved road, there are no road shoulders or bike lanes. Many dirt roads are sandy, washboarded or gravel. The Willow Springs road offers an enjoyable two to three-hour ride. Most popular biking trails in the Moab area are on Bureau of Land Management (BLM) land outside of the park.



Visitors biking along the scenic drive



## SHARE THE ROAD

Park roads are narrow and winding. Do not stop in the roadway—save sightseeing for designated viewpoints. Watch for pedestrians and bicycles. Ensure a minimum distance of three feet (one meter) when passing.



Level trail at the Windows offers a closer view of the arches (photo by Andrew Kuhn)



## FOUR-WHEEL DRIVE ROUTES

Arches has a limited number of four-wheel-drive roads. ATVs/OHVs are not permitted. Check at the visitor center for current road conditions, especially after recent rain. The Bureau of Land Management (BLM) maintains many popular 4WD routes outside the park.



## TRAVELING WITH PETS

Activities with pets are limited at Arches. Pets are not allowed on hiking trails, at overlooks or anywhere in the backcountry, even in carriers. 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 temperatures are above 65 °F as they can die of heat exhaustion. There are two 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

Outside the national parks, many public lands offer great hiking opportunities and do allow pets on trails.



## 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:

- **Dial 911 on your cellular phone:** You will reach the Grand County Sheriff’s Office, who will contact a ranger in the park.
- **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).



## 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.

**Campsite**  
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.



National Park Service  
U.S. Department of the Interior

### Park Website:

Scan code to access website, or visit [www.nps.gov/arch](http://www.nps.gov/arch)



### Park Mailing Address

Arches National Park  
PO Box 907  
Moab, UT 84532

### Phone

(435) 719-2299 (voice)

### Email

[archinfo@nps.gov](mailto:archinfo@nps.gov)

### Cover Photo

Sunrise from La Sal Mountains Viewpoint

### Arches Visitor Guide Published By

Canyonlands Natural History Association, a not-for-profit organization that assists the National Park Service in its educational, interpretive and scientific programs. For more information, see the back page.

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

# 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 2015, 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 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/Access Pass card holders. Children under five years of age are not permitted on Fiery Furnace walks.

## ENTRANCE FEES

The entrance fees at Arches National Park are \$10 per vehicle for a seven-day pass, and \$5 for bicyclists, those walking or on motorcycles. The following special passes are now available:

### 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.

### 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 Military Pass (Free)

For qualifying active military and their dependents. Present military ID cards at park entrance for verification.

### 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



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.



The fee visitors pay for Fiery Furnace walks directly supports this program. (photo by Andrew Kuhn)

# Sharing the Scenery

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.

To reduce traffic and tension:

- 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

Acceptable parking places include individually marked stalls, parking “lanes” along fences and existing wide spots along the roads. Never park on vegetation or in a manner that blocks traffic, and please don’t



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

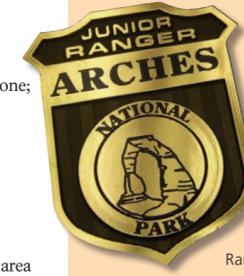
hold up the flow of cars by waiting for a parking spot. If there isn’t room at your chosen destination, consider moving to another area and coming back later.

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 breathtaking scenery, warm and welcoming park staff and opportunities to help preserve these timeless landscapes for the enjoyment of others for years to come.



## 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	Late Afternoon
Moab Fault	Park Avenue
The Three Gossips	La Sal Mountains Viewpoint
Sheep Rock	Courthouse Towers
The Great Wall	Petrified Dunes
Turret Arch	Balanced Rock
The Spectacles	The Garden of Eden
Double Arch	The Windows
Cache Valley	Delicate Arch
Wolfe Ranch	Fiery Furnace Viewpoint
Delicate Arch Viewpoint	Skyline Arch
Landscape Arch	Fins in Devils Garden
Double O Arch	Tower Arch



Sunset/moonrise at North Window.

[flickr.com/archesnps](https://www.flickr.com/archesnps)

## STAY ON TRAILS

Your steps matter.

## PROTECT PARK SOILS

Did you know that the desert floor in Arches is teeming with life?

Across the landscape, microscopic cyanobacteria bind together grains of sand, creating stable sites for algae, moss and fungi to grow. This living, biological soil crust transforms loose sand into a suitable environment for plants, animals and even humans to survive.

Human impacts, such as footsteps, plows or tire treads, crush the bonds that keep these microscopic communities together. By staying on trails, we are giving desert plants their best chance to survive in this challenging environment.

Your steps really do matter.

Learn more about desert soils on our website at <http://go.nps.gov/yoursteps>.



*Humble beginnings:* young soil crusts are hard to identify, so keep your feet on trails, slickrock or in sandy washes (where water flows).



*Old growth:* draped in lichens, mature crusts like these stabilize soils, trap water and provide safe haven for seedlings, like this Utah juniper.

# 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 trail leads to three massive arches (North and South Windows and Turret Arch). An alternate return, slightly longer, is by way of a primitive trail around the back of the two Windows, starting 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.

#### 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.

#### Courthouse Wash Rock Art Panel

**Starting Point:** Lower Courthouse Wash parking area (Highway 191, on the right 0.5 miles north of the Colorado River)  
**Length:** 1 mile (1.6 km) round trip  
**Time:** 30 to 45 minutes  
A short walk south across the Courthouse Wash bridge and a brief climb leads to a prehistoric rock art panel (at the base of the cliffs, facing west).

### 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.

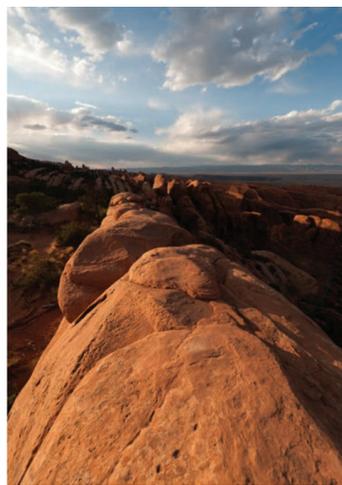


Rock cairns help visitors follow trails.

### 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.



Fins along the Devils Garden Primitive Trail

#### 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

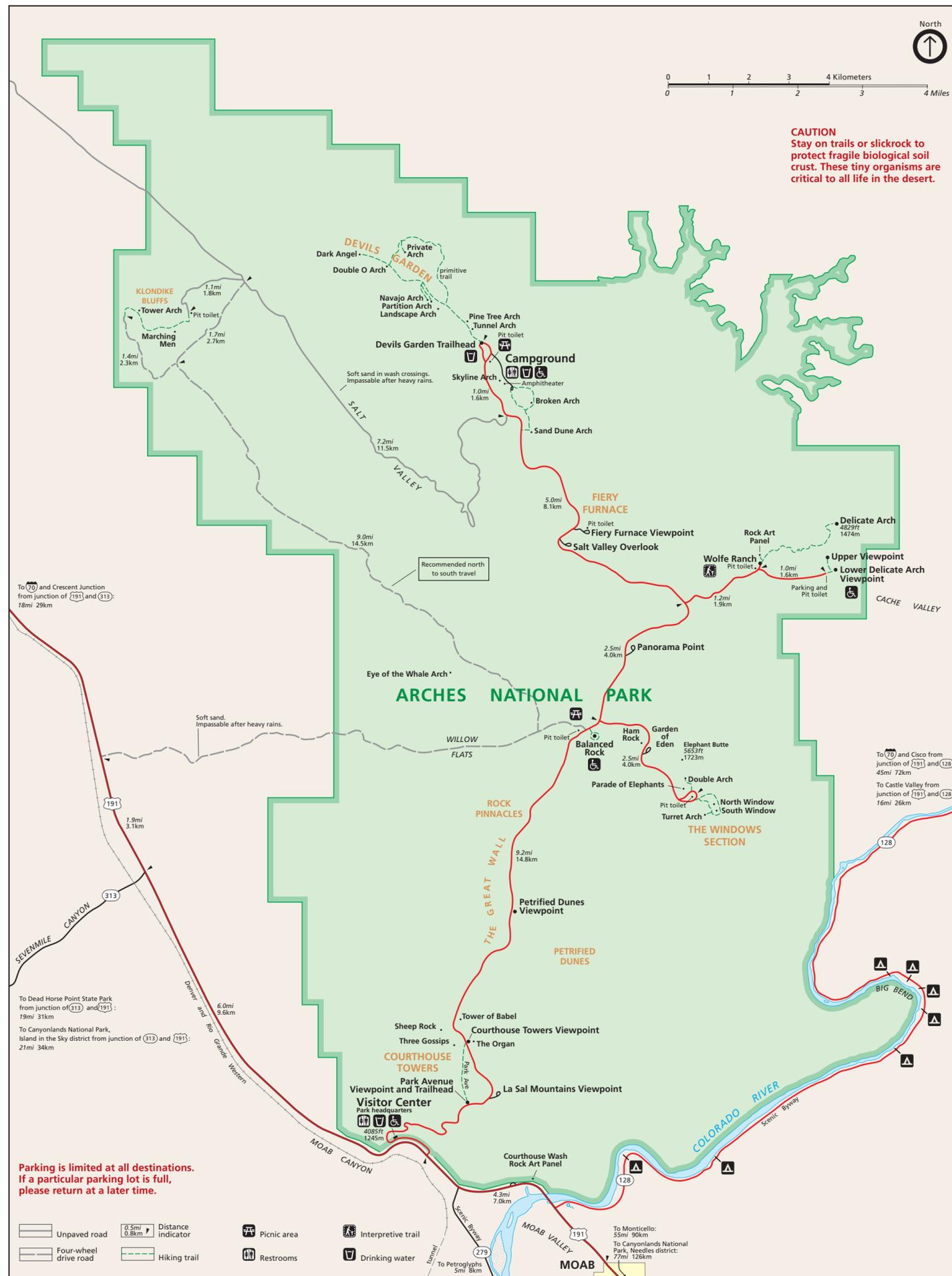
**Start:** Devils Garden Trailhead  
**Length:** 4.2 miles (6.8 km) round trip  
**Time:** 2 to 3 hours  
Beyond Landscape Arch, the trail becomes more challenging as it climbs over sandstone slabs; footing is rocky; there are narrow ledges with exposure to heights. Spur trails lead to Partition and Navajo Arches. Dark Angel is one-half mile (0.8 km) farther. Trail guide available at trailhead.

#### Devils Garden (includes primitive trail)

**Start:** Devils Garden Trailhead  
**Length:** 7.2 miles (11.6 km) round trip, including all spur trails to points of interest  
**Time:** 3 to 5 hours  
Longest of the maintained trails in the park, Devils Garden Trail leads to eight awe-inspiring arches. Expect narrow ledges with rocky surface hiking and scrambling on slickrock. **Not recommended when rock is wet or snowy.** Trail guide available at trailhead.

#### Fiery Furnace (Fee Area)

The Fiery Furnace is a mazelike labyrinth of narrow sandstone canyons that requires agility to explore. **To enter the Fiery Furnace, visitors must accompany a ranger-guided hike (see page 2) or obtain a day-use 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.





## Be Safe

Each year, park rangers respond to dozens of search and rescue incidents or medical emergencies in the park. These frequently involve heat exhaustion, dehydration, falls while climbing or scrambling and improper footwear. Follow these tips to keep yourself safe while you're here:

- **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.

# Traces of the Past

FOR MOST OF ARCHES NATIONAL PARK'S LONG HISTORY, red rock arches didn't exist. Salty inland seas, braided river systems, coastal plains and sand dunes fill the chapters in our geologic history book. How do we know? Geologists, like detectives, use clues such as fossils, ripple marks and cross-bedding to understand the story of each geologic layer.

Fossils embedded in some of the oldest rocks in this park help paleontologists crack the case of a former ancient sea. The marine fossils found in the 300-million-year-old Honaker Trail Formation have attracted scientific attention since the 1930s. Tiny, round discs of crinoid stems, lacy branches of bryozoans and clam-like brachiopods tell the story of a warm, shallow sea teeming with life. Crinoids, animals also known as sea lilies, look like underwater flowers with feathery arms for collecting food. Trilobites, an early ancestor of the crab, crawled or swam among colonies of bryozoans and horn corals. While crinoids, bryozoans and brachiopods still exist, other fossilized animals, such as horn corals and trilobites, have been extinct for millions of years.

Fossils are not the only clues to the stories written in the rocks. Patterns, such as ripple marks (evidence of running water), also reveal chapters of geologic history. The tall orange cliffs of Entrada sandstone, the main arch-forming layer, display stacks of diagonal lines called cross-bedding, tilting at different angles. These are the inner structure of 160-million-year-old sand dunes frozen in time. Geologists can track changes in ancient wind direction by studying the angle and orientation of cross-bedding. See the Navajo sandstone at Petrified Dunes Viewpoint for a taste of the largest dune field in the history of North America. This sandy desert stretched from California to southern Arizona and Wyoming at its peak, about 190 million years ago.

Landscape-scale sleuthing, beyond the boundaries of Arches National Park, allows geologists to chip away at geologic mysteries. This is possible because the same rock layers are also exposed at

## 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 was 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

BY ALICE DE ANGUERA



Cross bedding, evidence of ancient dunes, near the Windows

other locations in the Southwest and, on rare occasions, as far away as Minnesota! One mystery is how dinosaurs survived in the hot, dry climate now preserved in rock layers celebrated for their arches and spires. Surveys of nearby lands have revealed fossilized oases that may have provided refuge. Other fossils such as invertebrate burrows, plant pollen and spores, and dinosaur tracks add to the story – and geologists continue to make new discoveries.

To see some local fossils and other geologic clues, visit the Arches Visitor Center geology display. Marine fossils can be seen near the visitor center, and there are several places to see dinosaur fossils in the area such as Poison Spider Trailhead and Mill Canyon. Remember, it is illegal to collect fossils or make plaster casts of them; leave them for future visitors and scientists to enjoy and study. This landscape has many stories to tell, from marine wonderland to dusty desert. The next time you're out on the trail, take your curiosity with you and discover a page or two for yourself.

BY MATT SMITH



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

the generators only run if the PV system 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.

# Nature's Art

ARCHES 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, 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. They also absorb water and increase the nutrients that plants need to survive. Intact biological soil crusts provide a strong

## The Heart of the Desert

WATER. THE LACK OF IT DEFINES THE DESERT, AND YET, EVIDENCE OF its influence surrounds you. 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 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 faucet in the park, you're getting a clean, 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.

You might guess our "local" water source is the Colorado River, but its rust-red eddies and frothy rapids are most enjoyed by rafters and 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 this treated water and do not bathe at these spigots. And wherever you consume water in the park, please make sure to turn faucets completely off when you are finished, so that none of this precious resource is wasted.

BY ALICIA LAFEVER



The night sky at Delicate Arch (photo by Jacob W. Frank)

foundation for the whole park's ecosystem. This work of art is fragile. Mind the "velvet ropes" and stay on the path.

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.

BY KAREN HENKER



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

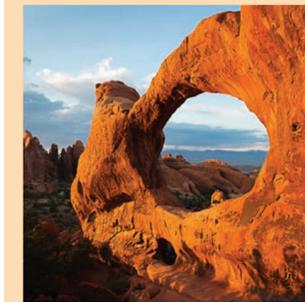
Wisely choosing how your water is packaged also conserves limited resources. Manufacturing a 16 oz. plastic water bottle uses 4 times that volume of water. In 2011, park visitors recycled an impressive 13,750lbs/6,237.8 kg of these single-use vessels, but how many more went to the landfill? Just as dinosaur 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 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.

## Preserving Dark Skies

National parks preserve some of the darkest skies in the country. To find the darkest parks and document the widespread affects 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 2,000 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, 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 marveling 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 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 trail.

- Take the moderately strenuous ranger-guided hike through the 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 just a short distance away. 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:

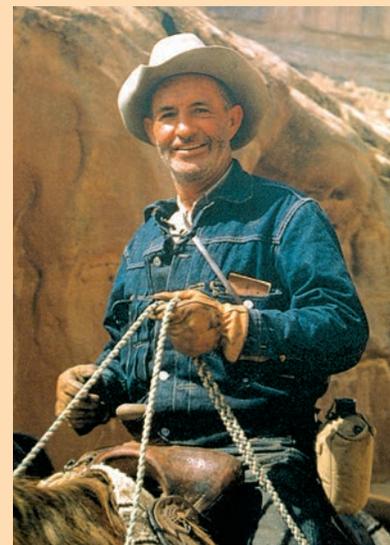
Do both drives listed above (or you can do one drive, spending ten minutes at each viewpoint along the way).

### 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 Canyonlands Parks

The Friends of Arches and Canyonlands Parks 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](http://www.bateswilson.org) to learn more or mail a check made out to *Friends of Arches and Canyonlands Parks* to:

Friends of Arches and Canyonlands Parks  
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](http://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)

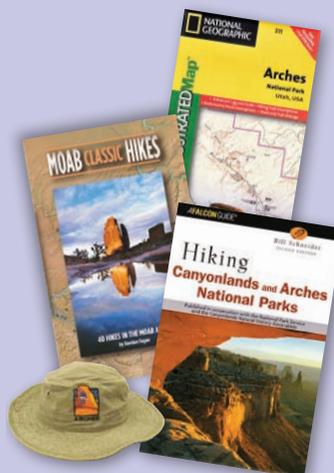
sells hundreds of items about Arches National Park and the rest of Utah's canyon country.

Visit their outlets in **Arches Visitor Center** and **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](http://www.cnha.org)

facebook.com/moabcnha  
twitter.com/CNHA1



Your purchase supports Arches National Park.

### Carry the park in your pocket!

The Official App for Arches National Park from CNHA

- Includes:
- Favorite destinations
  - Things to see and do
  - Stunning photos
  - A park map
  - Ranger-led activities
  - Junior Ranger program
  - How to maximize your visit
  - Photography tips & more!



Download the Essential App for FREE!