



Mojave National Preserve

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NPS COLLECTION



Where is the Wildlife?

By Neal Darby, Wildlife Biologist

People are often surprised to hear that wildlife is abundant in Mojave National Preserve. We often hear: “But we never see anything,” or “The desert is a wasteland,” or “They must only be out at night.”

In fact, Mojave National Preserve has one of the most diverse collections of wildlife in the southwest. It is the home of some 38 species of amphibians and reptiles, 50 species of mammals, and more than 300 kinds of birds. We even have a native fish—yes, a fish!—a chub that has been found in two ponds in the preserve.

The diversity of wildlife is due to the variation of elevations, precipitation patterns, and vegetation communities that provide habitat—food, cover, and water—for the animals. Elevations range from about 920 feet at the lowest point at Soda Lake near Baker, California, to about 8,000 feet at Clark Mountain, the only part of the preserve that lies north of I-15. Precipitation levels and vegetation vary with the elevation: creosote and cactus cover the lower desert floor while pinyon and juniper trees are found in the rises and mountainous areas.

It is the desert’s harsh environment, including extreme heat, drought, and intense sun, that explains why Mojave wildlife are not easily seen. To cope with these conditions, animals have evolved not only physiological adaptations, but also behavioral patterns. Armed with an understanding of some of these behaviors, visitors will have a better chance of finding and viewing wildlife. Below are some descriptions of unique



Campers at Mid Hills often see deer near the campground.

animal behaviors that could increase your chances of finding and viewing wildlife for which Mojave is best known.

Because wildlife can be unpredictable and dangerous, please take note of the following guidelines:

- Never attempt to feed wildlife.
- Do not approach wildlife too closely. Maintain a distance of 50 to 100 yards.
- Avoid surprising wildlife.
- Do not surround or corner animals.
- Do not touch, poke, harass, or harm animals.
- Stay clear of nests, dens, and young animals. Do not worry, mom is nearby.
- If you believe that a baby animal has been abandoned or that an adult animal has been injured, call for a ranger’s assistance. Do not

handle them.

- Stay within posted speed limits, and watch out for wildlife.
- Park your vehicle safely off the road before viewing wildlife.
- Respect the rights of private landowners.

All right, if you agree with these conditions, let’s go watch wildlife!

Bighorn sheep are diurnal, meaning that they are active during the day; this makes them easier to observe. Bighorn like steep, rocky terrain with low vegetation for good visibility, so look for them on or near mountain slopes. During the hot summer months, bighorn need freestanding water more frequently than in cooler months, so look for them near water sources like the seep along Zzyzx Road.

Mule deer are more active during the

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Welcome to Mojave!

With mild temperatures and longer days, spring is an inviting time to visit the Mojave. Winter rains pay off in spring, when wildflower blooms delight desert travelers. The Joshua trees are already blooming, and flowers may continue blooming at higher elevations into early June. Information about where to find flowers is included in this guide. Interested in animals? Read about how to find and observe wildlife in the desert.

Check our safety tips to make sure you are prepared. Gateway communities like Nipton, Baker, Fenner, and Ludlow, offer additional services for park visitors. Stock up on drinks and snacks and fill your gasoline tank before entering the preserve.

For every visitor, I recommend a stop at the Kelso Depot Visitor Center. This mission-revival style former train station now serves as the preserve’s principal information center. Explore exhibits, view an orientation film, shop for maps, postcards, and books, and have lunch at The Beanery, Kelso’s old-fashioned lunch counter. Rangers on duty offer trip-planning advice. Call ahead to check on hours. Declining federal budgets may result in reduced operations at Kelso. Phone numbers are listed on the back page of this guide.

Many adventures await you at Mojave National Preserve. Welcome, and enjoy your visit!

Stephanie Dubois
Superintendent



A golden eagle is captured by a motion-sensing camera, rinsing out his mouth.

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National Park Service
U.S. Department of the Interior

Mojave National Preserve

Established in 1994, Mojave National Preserve encompasses 1.6 million acres ranging in elevation from 800' near Baker to 7,929' at Clark Mountain. Although most of the park lies in the Mojave Desert, the southeast section grades into the Sonoran Desert, and elements of the Great Basin Desert are found at higher elevations east of the Granite, Providence, and New York mountains.

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

Summer Safety Tips



Hikers, carry plenty of water.



Carefully assess conditions before driving across a flooded roadway.



Stay on trails to avoid unexpected encounters with rattlesnakes.

The main cause of death in Mojave: More people die in single-car accidents due to speeding than by any other means. Reduce your speed.

Do not depend on a GPS navigation system: GPS maps of remote areas, including Mojave, are notoriously unreliable. Carry a folding map.

Carry and drink plenty of water: Carry a minimum of a gallon per person per day in your vehicle even if you are just passing through. You will need it in an emergency. Carry more if you plan to be active. Fluid and electrolyte levels must be balanced, so have salty foods or "sports drinks" handy as well.

Flash Floods: While driving, be alert for water running in washes and across dips in the road. When hiking and camping, avoid canyons and washes during rain storms, and be prepared to move to higher ground.

Backcountry Travel: Hikers, backpackers, and those traveling on dirt roads need to be self-reliant and well-prepared. Plan ahead, carry detailed maps, and let someone know your plans.

Avoid hiking in the heat: Do not hike in the low elevations when temperatures are high. The mountains are cooler in summer.

Watch for signs of trouble: If you feel dizzy or nauseated, or if you develop a headache, get out of the sun immediately, and drink water or sports drinks. Dampen clothing to lower body temperature. Be alert for symptoms in others.

Dangerous Animals: Never place your hands or feet where you cannot see first. Rattlesnakes, scorpions, or black widow spiders might be sheltered there.

Mine Hazards: Never enter a mine. They are unmaintained and unstable, and you might encounter pockets of bad air or poisonous gas. Stay out, and stay alive!

In Case of Emergency: Cell phones do not work in many areas. Try moving uphill to get a signal. To call for help, dial 911 or the Federal Interagency Communications Center at 909-383-5651. After calling, stay with your car until help comes.

Essential Information

Dates and Hours of Operation

The preserve is always open. Information centers (see below) maintain regular hours of operation.

Fees and Reservations

There are no entrance fees. See page 6 for information about campground reservations and fees.

Information Centers

Three information centers provide orientation, information, and trip-planning advice. Park rangers are on duty. Western National Parks Association (WNPA) bookstores offer books, maps, and more.

Kelso Depot Visitor Center

Located 34 miles south of Baker, Calif. on Kelbaker Road. Open Friday through Wednesday, 9 a.m. to 5:00 p.m. **Operational change due to sequestration: closed Thursday and Friday. Please call (760) 252-6108 or visit www.nps.gov/moja for more information.**

Hole-in-the-Wall Information Center

Located near Hole-in-the-Wall Campground. Winter hours (October–April): Wednesday through Sunday, 9 a.m.–4 p.m. Summer hours (May - September) Saturday, 9 a.m.–4 p.m.

Headquarters Information Center

Located at 2701 Barstow Road, Barstow, Calif. Open Monday through Friday, 8 a.m.–4:30 p.m.

Food: The Beanery @ Kelso

The concessioner-operated lunch room offers hot and cold beverages, soups, salads, sandwiches, and snacks. Located at Kelso Depot Visitor Center. Change to: Open Friday through Wednesday, 9 am to 5 pm. Closed Thursday and Friday.

Water

Drinking water is available only at Kelso Depot Visitor Center, Hole-in-the-Wall Information Center, Hole-in-the-Wall, Black Canyon campgrounds and Mid-Hills Campground.

Gasoline

There are no gasoline stations within Mojave National Preserve. Gasoline can be purchased along I-40 at Needles, Fenner, and Ludlow, Calif., along I-15 at Baker, Calif., the Cima Road exit, and Primm, Nev., and along U.S. 95 at Searchlight and at the Nev.163 junction south of Cal-Nev-Ari, Nev.

Lodging

There are no motels within Mojave National Preserve. Lodging might be available in Barstow, Nipton, Ludlow, Needles, Baker, and Twentynine Palms, Calif., and in Primm and Searchlight, Nev.

Bicycles

Bicycles are allowed in parking areas, on paved roads, and on existing, open dirt roads. Bicycles are not allowed in Wilderness Areas or for cross-country travel.

Pets

Though not allowed inside information centers, pets are welcome elsewhere. They must be leashed and never left unattended. Dogs used during hunting activities must be under the owner's control at all times. Pet excrement must be collected and disposed of in garbage receptacles.

Permits

Permits are required for all organized events, group events (more than 15 individuals or 7 vehicles), and commercial activities such as filming. Fees apply. Proof of insurance and posting of a bond might also be required. Call 760-252-6107 or visit www.nps.gov/moja for more information.

Hunting and Firearms

Hunting is permitted in accordance with state regulations. All hunting activities require a license; additional permits and tags might apply. Visit the California Department of Fish & Game website at <http://www.dfg.ca.gov/> for more information.

Target shooting or "plinking" is prohibited. All firearms transported within the preserve must be unloaded, cased, and broken down, except during lawful hunting activities. No shooting is permitted within ½ mile of developed areas, including campgrounds, information centers, Kelso Dunes, Fort Piute, Sweeney Granite Mountains Desert Research Center, and the Desert Studies Center at Zzyzx.

Collecting and Vandalism

Disturbing, defacing, or collecting plants, animals, rocks, historic or archeological objects is prohibited. Leave these resources as you find them for everyone to enjoy. Metal detectors are not allowed.

Private Property

Private inholdings are found throughout the preserve. Please respect the rights of our neighbors. It is your responsibility to obtain permission before hunting, hiking, or entering private property.

Cattle and Fences

Most grazing within Mojave National Preserve occurs on public land. This land is open to you to explore, but please don't disturb cattle, fences, or water tanks. Leave gates as you find them.

Firewood & Campfires

Wood is scarce in the desert. Cutting or collecting any wood, including downed wood, is prohibited. All firewood, including kindling, must be brought in. Firewood might be available for purchase at Baker, Fenner, Needles or Nipton, Calif. Campfires are allowed in campground fire rings and other established sites. To minimize your impact, use a firepan and pack out the ashes. Please do not leave fires smoldering or unattended.



Exploring Mojave

Scenic Cima Road connects I-15 with Cima, Calif., traversing the world's largest concentration of Joshua trees.

Avenues to Adventure

Mojave National Preserve is vast. At 1.6 million acres, it is the third-largest unit of the National Park System in the contiguous United States. While much of Mojave's wild and historic splendor is available only to those who travel its trails and unmaintained roads, the primary roads of the preserve offer endless opportunities for exploration (see map on page 8).

Kelbaker Road

A 56-mile paved road stretching from I-15 at Baker, Calif. in the north to I-40 east of Ludlow, Calif. in the south, Kelbaker Road winds past cinder cones, lava flows, Kelso Depot, Kelso Dunes, and the Granite Mountains.

Cinder Cones & Lava Flows

No signs or services.

About 14 miles southeast of Baker, Kelbaker Road traverses a 25,600-acre area of lava flows and volcanic cinder cones thought to range in age from 10,000 to 7 million years old. In 1973, the area was designated as Cinder Cones National Natural Landmark due to its scenic beauty and exceptional geological value. Aiken Mine Road (19 miles southeast of Baker, Calif.) offers an interesting side trip through the heart of the area and access to a lava tube. **High clearance and four-wheel drive recommended.**

Kelso Depot Visitor Center

Information, exhibits, orientation film, art gallery, bookstore, food (The Beanery @ Kelso), restrooms, water, picnic area.

Located 34 miles southeast of Baker, Kelso Depot began operation in 1924 and served as train station, restaurant, and employee housing on the Los Angeles and Salt Lake route of the Union Pacific Railroad. Now Mojave National Preserve's principal information center and museum, extensive exhibits describe the cultural and natural history of the preserve. Historically furnished rooms offer a glimpse into Kelso's past.

Kelso Dunes

Self-guiding trail, vault toilets, no water.

About 42 miles southeast of Baker (8 miles south of Kelso Depot), then 3 miles west on a graded dirt road. Nearly 700 feet high and covering a 45-square-mile area, the Kelso Dunes were created over the course of 25,000 years by winds carrying sand grains from the dried Soda Lake and Mojave River Sink located to the northwest. The Providence and Granite mountains served as barriers that trapped the blowing sand. The dunes produce a "booming" or "singing" sound when sand with the right moisture content slides down the steep slopes. Try it for yourself—run down a dune slope (but don't trample vegetation!) to initiate the sound.

Granite Mountains

No signs or services.

An imposing jumble of granite marks the south entrance to the preserve, 50 miles southeast of Baker on Kelbaker Road. Portions of the Granite Mountains lie within the University of California's Desert Research Center; please respect the signs that mark the boundary. **High clearance and four-wheel drive recommended.**

Clark Mountain

No signs or services.

The only portion of Mojave National Preserve north of I-15, Clark Mountain is also its highest point, at 7,929 feet. A relict white fir grove near the top is one of only three in the Mojave Desert. Check detailed maps or ask a ranger for access information. **High clearance and four-wheel drive recommended.**

Cima Road

About 26 miles east of Baker, Calif., the paved Cima Road connects I-15 with Cima, Calif., 16 miles to the southeast.

Cima Dome & Joshua Tree Forest

Self-guiding trail, no water.

The near-perfect symmetry of Cima Dome rises 1,500 feet above the surrounding desert and provides ideal habitat for the world's largest concentration of Joshua trees. Although the top of the dome is located west of Cima Road near the Teutonia Peak Trailhead, this unusual geologic feature is best seen from a distance. Try the view looking northwest from Cedar Canyon Road, 2.5 miles east of Kelso Cima Road.

Cedar Canyon & Black Canyon Roads

Mostly unpaved, the 20-mile Cedar Canyon Road connects Kelso Cima Road in the west with Ivanpah Road in the east, paralleling (and sometimes joining) the historic Mojave Road. Black Canyon Road (unpaved north of Hole-in-the-Wall) connects Cedar Canyon Road with Essex Road, 20 miles to the south.

Rock House

Loop trail, wayside exhibits, pit toilet, picnic table. A well-known desert landmark, the Rock House is emblematic of creative desert building styles. 5 miles east of Black Canyon Road on Cedar Canyon Road.

Mid Hills

Campground, trailhead, vault toilets, water. Not recommended for RVs.

About 2 miles west of Black Canyon Road at the north end of Wild Horse Canyon Road, Mid Hills supports pinyon-juniper woodland habitat. The effects of a fire that swept through the area in June 2005 are evident, although several campsites in the popular campground still contain shady stands of pinyon pine and juniper.

Hole-in-the-Wall

Information center, bookstore, campgrounds, picnic area, trailhead, restroom, water, telephone. Just north of the junction of Black Canyon and the south end of Wild Horse Canyon Roads, rhyolite cliffs riddled with holes and hollows are the backdrop for Hole-in-the-Wall.

Piute Spring

About 7.4 miles west of U.S. 95 on the unmarked and unpaved Mojave Road, then 3.1 miles west on an extremely rough unmarked dirt road. **High clearance and four-wheel drive recommended.**

Fort Piute and Piute Spring

Trails, wayside exhibits, no signs or services.

Willows, cottonwoods, and rushes thrive along a half-mile section of Piute Creek. Fort Piute (still visible) was one in a string of military outposts built along the Mojave Road. Please don't climb on the foundations or remove anything.

Dirt Road Driving

Prepare Your Vehicle

Ensure that your vehicle is in good condition: check tires, oil, and gas gauge.

For emergencies, carry tools, tire jack, towrope, extra water, and fluids for your vehicle.

Know the Rules of the Road

All vehicles operating within Mojave National Preserve must be street-legal in accordance with California DMV requirements, including current registration and tags, lights and turn signals, and valid insurance. California "Green Sticker" and "Red Sticker" programs are not recognized within the preserve.

Off-pavement travel is allowed only on existing, open dirt roads. Do not travel cross-country or create new routes. This rule is strictly enforced; violators will receive citations. Driving in washes is not permitted. Watch for and respect Wilderness Boundary signs; motorized vehicles and bicycles are not allowed in designated Wilderness Areas.

Check Road Conditions

Road conditions vary widely. Dirt roads might be rough, sandy, or muddy, rendering them impassable, and the unprepared motorist could be trapped many miles from help. Watch for cattle, burros, and other wildlife on roadways.

Not all roads are shown on all maps; traces and illegal shortcuts add to the confusion. Carry a good map, and ask a park ranger for current road conditions.

Zzyzx Road

Six miles southwest of Baker on I-15, Zzyzx Road leads 5 miles south into the preserve along the western shore of Soda Dry Lake.

Zzyzx/Soda Springs

Self-guiding trail, wayside exhibits, vault toilets, non-potable water, picnic area.

Historically known as Soda Springs and later renamed Zzyzx (pronounced ZYE-zix), this oasis is home to the California State University Desert Studies Center. The buildings and pond were developed in the 1940s by Curtis Springer, who operated a health resort at the site. Zzyzx is open to the public—stroll around Lake Tuendae and along the shore of Soda Dry Lake. Please do not disturb participants when classes are in session.

Nipton, Ivanpah & Lanfair Roads

Eleven miles south of Primm, Nev., Nipton Road begins at I-15 and passes through Nipton, Calif., 11 miles east. Ivanpah Road (only the 10 northernmost miles paved) heads southeast of Nipton Road, through the Ivanpah and Lanfair valleys, eventually connecting with the paved Lanfair Road and the Fenner Valley. Together stretching 46 miles, Ivanpah and Lanfair roads connect the northern preserve boundary (bordering Nipton Road) with the southern near Goffs, Calif.

Hotel Nipton

Privately operated hotel, store, campground, & more; for information call 760-856-2335 or email at stay@nipton.com.

Built in 1910, this charming hotel reflects the railroad, ranching, and mining history of the small community at Nipton.

Caruthers Canyon

Primitive camping, hiking, no signs or services.

About 5.5 miles west of Ivanpah Road on New York Mountains Road, then 2.7 miles north on an unsigned road, Caruthers Canyon is located in the rugged New York Mountains. Surrounded by mountains rising over 7,500 feet, a botanical "island" of chaparral plants remains from wetter times of the past. **High clearance and four-wheel drive recommended.**

Sand & Mud Driving Tips

- Be sure to carry plenty of drinking water and emergency supplies.

- Engage four-wheel drive before entering deep sand or mud.

- Don't gun the engine—this will spin the tires, dig you in deeper, and could bury your vehicle to the frame. Smooth, easy power is better than too much power; use low gearing and just enough throttle to maintain forward movement.

- If you detect a loss of traction, turn the steering wheel rapidly from side-to-side—this might help to generate traction.

- If your vehicle gets stuck, place solid materials (such as floor mats) under the tires to provide traction.

- If you're really stuck, it's best to stay with your vehicle. A stationary, stranded vehicle is much easier to locate than a person traveling on foot. Avoid strenuous activity during the heat of the day; stay in the shade of your vehicle.

Lanfair Valley

No signs or services.

South of the New York Mountains along Ivanpah and Lanfair roads, this high valley shelters an impressive Joshua tree forest and was an early ranching and homesteading center. From 1893 until 1923, the Nevada Southern Railway ran up the valley from Goffs, providing services to homesteaders and ranchers in the valley and to miners in the mountains beyond. While little evidence remains of homesteads that once dotted the valley, tracts of private property still exist. Please respect the rights of landowners.



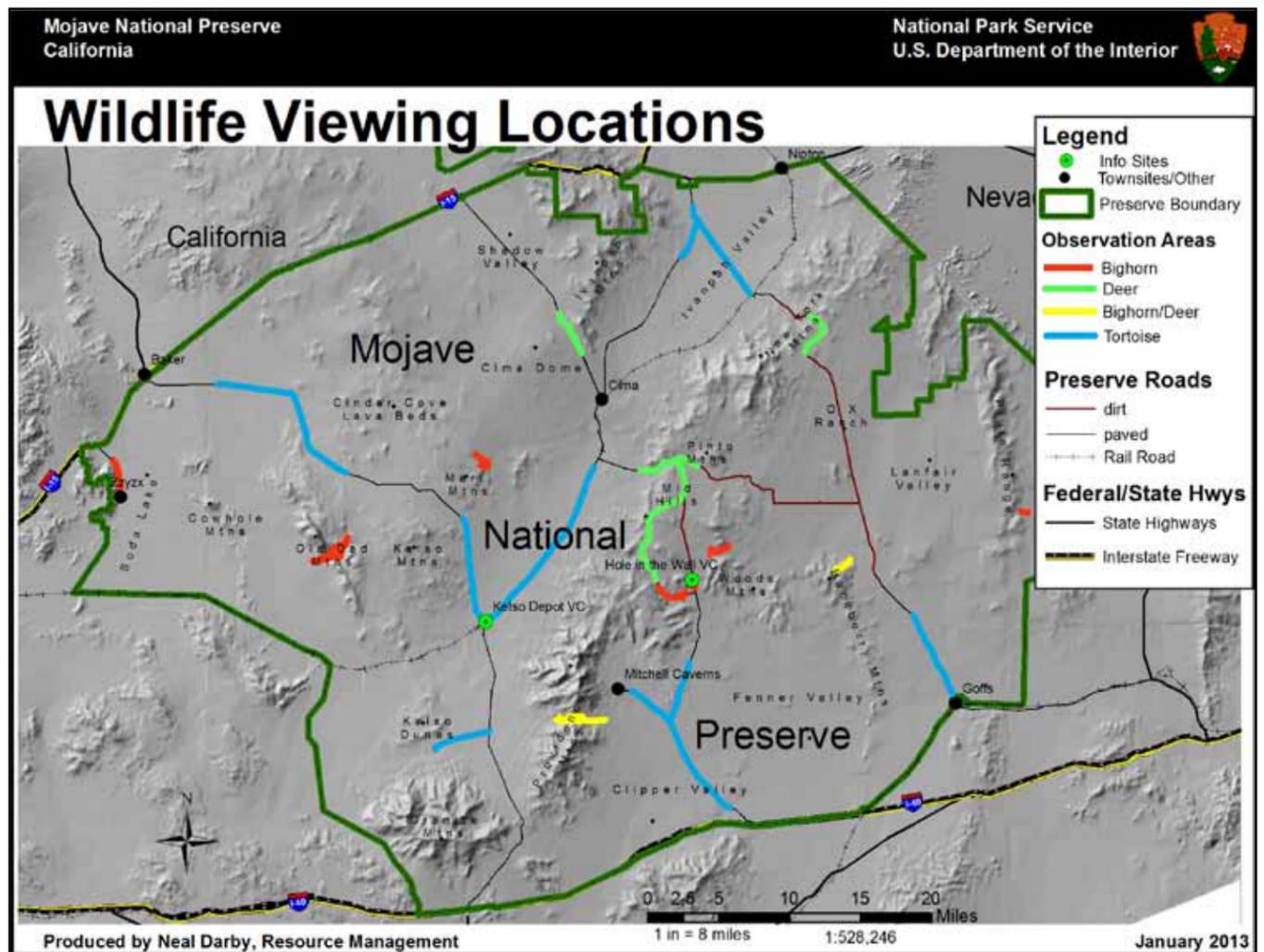
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early morning and evenings as well as at night. Deer like hilly country, but not slopes that are steep and rocky as bighorn prefer. Deer also like more brushy vegetation cover. Look for deer in brushy, mountainous areas such as the Mid Hills or New York mountains. Spend a night in the Mid Hills Campground, as deer readily frequent this area.

The **desert tortoise** is California's state reptile and a symbol of the Mojave Desert. Tortoises are active for only brief periods throughout the year. They avoid extreme heat and cold by escaping into deep burrows and venturing out only when temperatures are just right. This means that the window of opportunity for viewing tortoises is short, primarily in the spring and again after summer rains. Tortoises are diurnal, being primarily active during the day. Broad creosote flats with sandy loam soils are good bets for observing tortoises. Please be careful, tortoises are often seen on roadways and can be killed by vehicle strikes. Drive slowly and be especially cautious in the spring or after summer rains. Observe tortoises from a distance. When frightened, a tortoise will often void its bladder, resulting in a loss of water that could be fatal for the animal.

These are just a few wildlife species that can be seen in the preserve. Following this advice doesn't guarantee that you will see wildlife, but your chances are greatly improved. If you are hoping to see an animal that was not mentioned, ask a ranger for suggestions about how to find it.

Don't forget to share your observations with us. Just drop off a note with any park ranger providing the species, date, and location as precisely as you can describe it. This provides important information to us concerning species diversity and distribution.



Watch for desert bighorn on the road to Zzyzx.
Left: Coyote are often seen crossing the road at dawn or dusk.

The photographs in this article were taken with remote infrared motion sensing cameras. The motion of each animal photographed triggered the shutter.

The use of this type of camera is becoming more popular among the public. However, anything that is left for more than 24 hours in the preserve technically requires a special use permit. If you would like to place one of these cameras, first contact the preserve's wildlife biologist for information and suggestions.

Wildflowers paint the desert

Hot, dry, remote . . . for some, the prospect of visiting a place called "Mojave" conjures up an image of a survival exercise in sand and rocks amid unrelenting desolation. But a trip to Mojave National Preserve can be downright civilized, with plenty of possibilities for exploration.

As with many adventures, timing is everything, and desert aficionados know that April can be the sweetest month. The days are longer, temperatures are mild, and, if winter rains have fallen, wildflowers paint a rainbow of colors. The interplay of rainfall timing and quantity creates a unique bloom event each spring.

If you are coming for the wildflowers, some pre-visit research will contribute to a more satisfying visit. Mojave's website offers week-by-week updates on wildflower viewing. DesertUSA.com is a tremendous resource, as it compiles information on desert blooms from across the southwest.

Here is some enduring advice for seekers of wildflowers:

When conditions are right, the sandy foothills near Kelso Dunes will produce carpets of desert sand

verbena and dunes evening primrose. Explore the washes for flowers, and then scramble to the top of the dunes for a spectacular view. As you descend, listen for the famous "booming" sound that moving sands here produce when weather conditions are right.

If rain has fallen on the cinder cones and lava beds, hundreds of tiny Biglow monkey flowers lend a

purple cast to the dark volcanic soil. Locals call these "belly flowers," as they are best photographed lying down! With a high-clearance vehicle, you can also visit a lava tube cave. Bring a flashlight for this activity.

To see the snowball-like blooms of the Joshua tree, try hiking Teutonia Peak Trail where this signature plant of the Mojave grows in profusion. The climb to the peak lifts you off the desert floor and affords a view of Joshua trees stretching as far as the eye can see.

If you are looking for flowers in late April and May, visit Hole-in-the-Wall. A profusion of desert globe mallow and verbena often covers an area that burned in a massive wildfire in 2005. This is the best area for hikers, with trails leading past petroglyphs, through cactus and yucca gardens, and into Banshee Canyon, where you'll discover the holes of Hole-in-the Wall.

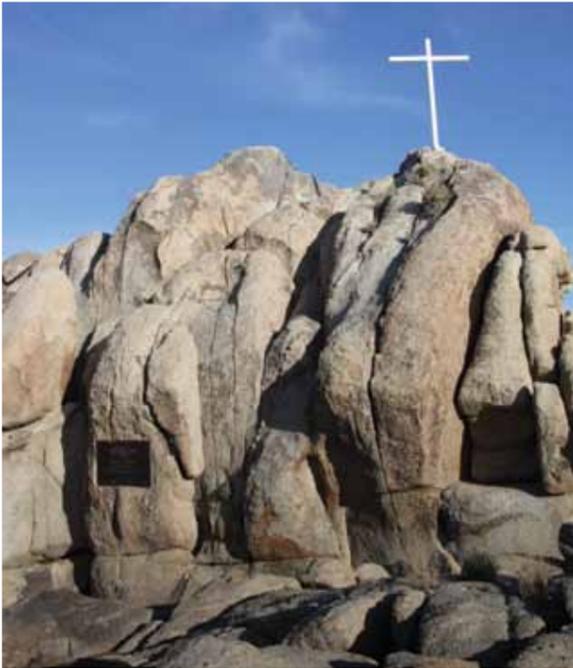
Report what you see to rangers at Kelso Depot Visitor Center and Hole-in-the-Wall information center so they can share your information with others.



Hairy sand verbena and dunes evening primrose can sometimes be found at Kelso Dunes.



White Cross World War I Memorial



A new cross was placed on Sunrise Rock on Veterans Day, November 11, 2012.

A 12-year legal battle over a cross in Mojave National Preserve has finally come to a close.

After a U.S. Supreme Court ruling, the federal land on which the cross had been erected has been exchanged for a donated parcel at another location within the preserve. The property where the cross originally stood

now belongs to the Veteran's of Foreign Wars, and a new cross is on display.

The original cross was erected on Sunrise Rock in 1934 by veterans of World War I, along with a wooden plaque stating that the cross was placed "to honor the dead of all wars." Over the decades, the cross sometimes fell into disrepair, but local residents continually replaced it, and Easter services often were held at the site.

The controversy over the cross began in 2001, when a lawsuit was filed in U.S. District Court arguing that the display of the cross within the preserve violated the First Amendment of the Constitution. The case received substantial media attention as it advanced through the federal court system. The First Amendment states that "Congress shall make no law respecting an establishment of religion." This generally is interpreted to mean that government should neither establish a religion nor prefer any religion over another.

In 2002, the District Court found that the presence of the cross on federal land conveyed the impression that the government endorsed a particular religion and enjoined the National Park Service from displaying the cross. The cross was then covered to comply with the court order. In 2003, Congress also became involved when it established the White Cross World War I Memorial at Sunrise Rock to commemorate United States participation in World War I and to honor the American veterans of World War I. In 2004, Congress directed the National Park Service to arrange for a land exchange that would remove the War Memorial parcel from federal ownership.

The land exchange was delayed when, in August 2005, the U.S. District Court ruled that the proposed land swap would not resolve the underlying constitutional violation because it was best understood as an attempt to keep the cross atop Sunrise Rock. The District Court enjoined the National Park Service from carrying out the land exchange mandated by Congress and reaffirmed its earlier injunction which prohibited the display of the cross.

Then, in April 2010, the U.S. Supreme Court, in a 5-to-4 decision, reversed the decisions of the lower courts and directed that the District Court reconsider the constitutionality of the land exchange legislation.

Meanwhile, some became impatient with the grinding wheels of justice. In May 2010, someone removed the cover and exposed the cross. A short time later, park rangers discovered that the cross had been entirely removed. Then, a new cross appeared. Park rangers promptly removed it, in compliance with the District Court's injunction against display of a cross.

The case was returned to the District Court, and a settlement was reached in April 2012. Henry and Wanda Sandoz, a local couple who had long been the caretakers of the cross, donated a five-acre tract of land that they owned within the boundaries of the preserve to the United States. In exchange, the United States conveyed a one-acre parcel at Sunrise Rock to the Veterans of Foreign Wars. The boundary of the Sunrise Rock parcel has been marked with post-and-cable fencing to show that it is private property. The site is now managed as the White Cross World War I Memorial by the Veteran's of Foreign Wars. The White Cross World War I Memorial is open all the time. It is located 11 miles south of I-15 on Cima Road.

Partners Preserving Our Parks— Mojave Desert Land Trust

By Kimberly Bowers, Director of Communications

Many of our national parks and preserves have privately-owned lands inside their boundaries. Mojave Desert Land Trust is a regional partner of the National Park Service. That purchases private property within desert national parks and designated wilderness areas, restores the land by removing debris, abandoned vehicles and hazardous materials, then conveys these lands back to the public to be managed by the National Park Service. By preserving these lands, our national parks and wilderness areas are defragmented, allowing for greater protection and more efficient management of fragile resources. There are currently thousands of acres of private lands within the preserve.

Since 2006, Mojave Desert Land Trust has acquired 435 parcels within Mojave National Preserve, preserving totaling more than 16,600 acres. Dozens of abandoned trailers and vehicles along with many tons of debris were removed to restore wildlife habitat and provide safe recreational lands for visitors. The Land Trust's Stewardship program invites volunteers to join monthly Restoration and Monitoring events that assist the clean up and restoration of wildlife habitat within the preserve.

Mojave Desert Land Trust, founded in 2005, is a 501(c)(3) public charity whose mission is to protect the Mojave Desert ecosystem and its scenic and cultural resource values. Located in Joshua Tree, California, Mojave Desert Land Trust has preserved over 41,000 acres of desert land through acquisition, land stewardship, and strategic partnerships. Learn more about Mojave Desert Land Trust at www.mojavedesertlandtrust.org.



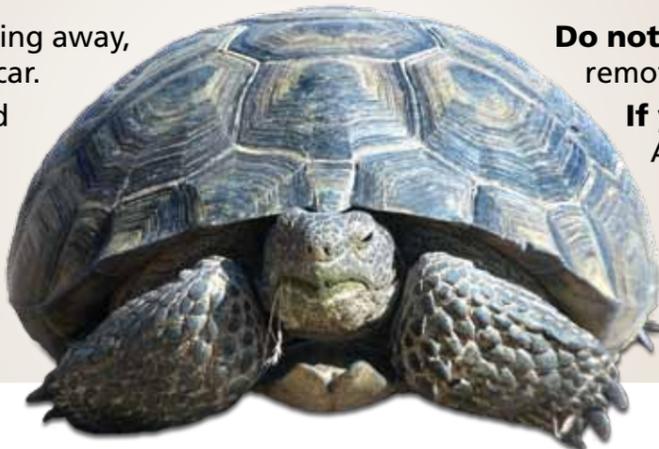
Volunteers on a land restoration project disguise the entrance to a closed vehicle route.

Protect the desert tortoise

Check beneath your vehicle before driving away, tortoises sometimes rest in the shade of a car.

Don't release pet tortoises into the wild they may carry diseases that will spread to wild tortoises. Contact a ranger to learn about tortoise adoption programs.

Don't dump or litter. Garbage attracts ravens and other predators that feed on tortoise eggs and hatchlings.



Do not take a tortoise. It is illegal to remove tortoises from the wild.

If you see a tortoise, stay back. Approaching too closely may cause a tortoise to spray urine in self-defense a potentially fatal loss of fluid.

Reduce speeds and watch for tortoises on desert roadways

Camping & Backcountry Travel

Backcountry Guidelines & Regulations

Backcountry travel and camping—backpacking, roadside camping, and horsepacking—require careful planning in order to ensure a safe and rewarding experience. Visitors should adhere to National Park Service regulations and are further encouraged to follow Leave No Trace guidelines to minimize their impact on the fragile desert environment. Additional regulations apply for roadside camping (see below) and horsepacking (talk with a park ranger or visit us online for more information: www.nps.gov/moja).

Leave No Trace principles are rooted in scientific studies and common sense. The message is framed under seven Leave No Trace Principles presented below with accompanying regulations and guidelines specific to Mojave National Preserve:

1. Plan Ahead and Prepare

- There is no permit or registration system for backcountry camping at Mojave National Preserve; be sure to notify others of your travel itinerary.
- Few established trails exist; carry a good map and familiarize yourself with desert travel and survival skills before beginning your trip.

2. Travel and Camp on Durable Surfaces

- Reuse existing campsites (required for roadside camping—see below).
- Do not make camp in a dry wash—flash floods develop quickly in the desert.
- Camping is limited to a maximum of 14 consecutive days per visit/stay and 30 total days per year.
- Campsites must be more than 200 yards from any water source.
- Camping is not permitted: within 1/4 mile of any paved road; within 1/2 mile of Fort Piute or Kelso Depot; within 1 mile north (i.e., the crest of the dunes) or 1/4 mile south of the Kelso Dunes access road. (Exceptions may apply for roadside camping—see below.)

3. Dispose of Waste Properly

- Store all food and garbage in a manner that will prevent access by wildlife. Carry plastic bags and pack out all trash.
- Bury human waste in catholes 6-8 inches deep, at least 200 feet from water, camp, and trails. Pack out all toilet paper and hygiene products.
- Pet excrement must be collected and disposed of in garbage receptacles.

4. Leave What You Find

- Disturbing, defacing, or collecting plants, animals, rocks, and historic or archeological objects is prohibited. As part of our national heritage, these resources should be left as they are found for all to enjoy. Metal detectors are not allowed.

5. Minimize Campfire Impacts

- Campfires are allowed in established fire rings only, or with use of a portable firepan (be sure to pack out ashes). Do not leave fires smoldering or unattended.
- Cutting or collecting any wood, including downed wood, is prohibited. All firewood must be brought into the preserve.

6. Respect Wildlife

7. Be Considerate of Other Visitors

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Friends and family enjoy the spectacular setting of Hole-in-the-Wall Campground.

Campgrounds

Hole-in-the-Wall Campground

Facilities: pit toilets, trash receptacles, potable water, fire rings, picnic tables, dump station; no utility hookups.

Fees: \$12 per site per night, \$6 for America the Beautiful Senior/Access Pass holders.

Reservations: not accepted; campsites available on a first-come, first-served basis.

At 4,400 feet in elevation, Hole-in-the-Wall Campground is surrounded by sculptured volcanic rock walls and makes a great basecamp for hikers (see p.7) and for exploring nearby Mitchell Caverns in the Providence Mountains State Recreation Area. Thirty-five campsites accommodate RVs and tents; two walk-in sites are also available.

Mid Hills Campground

Facilities: pit toilets, trash receptacles, potable water, fire rings, picnic tables; no dump station or utility hookups.

Fees: \$12 per site per night, \$6 for America the Beautiful Senior/Access Pass holders.

Reservations: not accepted; campsites available on a first-come, first-served basis.

The Hackberry Fire swept through the Mid Hills area in June 2005, burning much of the vegetation. About half of the 26 campsites were left unharmed, however—they remain surrounded by pinyon pine and juniper trees. At 5,600 feet in elevation, Mid Hills is much cooler than the desert floor below. The access road is unpaved and is not recommended for motorhomes or trailers.

Black Canyon Equestrian & Group Campground

Facilities: corrals, pit toilets, trash receptacles, potable water, fire ring, grill, picnic shelter with tables.

Fees: \$25 per group per night.

Reservations: required; call 760-928-2572 or 760-252-6104

Located across the road from Hole-in-the-Wall Information Center. Ideal for both large groups and for riders - bring your own horse! Permits required for large groups (see p.2 for permit information).

Nearby Camping Areas

Afton Canyon

25 miles southwest of Baker on I-15, has a BLM campground with tables and fire rings for \$6 per night.

Commercial camping is also available at Baker, Barstow, Needles, and Nipton, Calif.

Roadside Camping

Roadside vehicle camping is permitted in areas that have been traditionally used for this purpose. By reusing existing sites, you help protect the desert from further damage. Sites with existing rock fire rings should be considered disturbed and suitable for roadside camping. Many roadside camping sites cannot accommodate multiple vehicles; please don't enlarge them. Do not camp along paved roads or in day-use areas, and stay at least 200 yards from all water sources.

The National Park Service encourages roadside campers to use the following, selected sites:

Near Kelbaker Road: Rainy Day Mine Site

15.2 miles southeast of Baker on Kelbaker Road, then 0.3 miles northeast on the unsigned and very sandy road to the Rainy Day Mine. Four-wheel drive recommended; no RVs.

Granite Pass

6.1 miles north of I-40 on Kelbaker Road, just north of Granite Pass, then west on one of several access roads. Campsites are located just north of the granite spires. High clearance vehicle recommended; no RVs.

Kelso Dunes Mine

4 miles west of Kelbaker Road on the unpaved Kelso Dunes Road. One campsite is located south of the road, ¼ mile past the marked trailhead. Several others are available ¾ mile beyond, near a clump of trees. Except at these sites, roadside camping is prohibited along Kelso Dunes Road (including at the trailhead).

Near Cima Road: Sunrise Rock

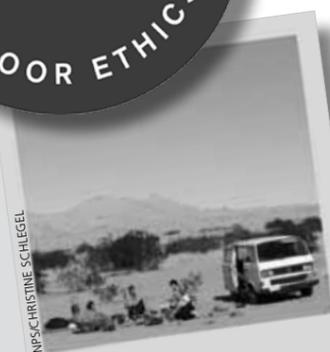
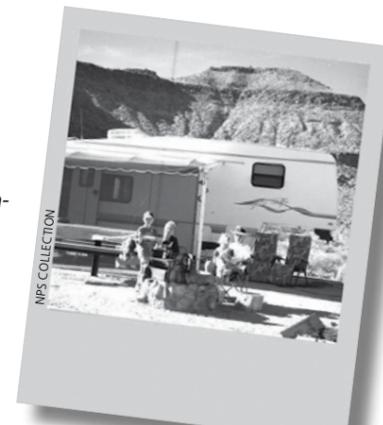
12 miles south of I-15 on the east side of Cima Road. Trailhead for Teutonia Peak Trail is nearby on the opposite side of Cima Road.

Near Black Canyon Road: Black Canyon Road (East)

4 miles south of Hole-in-the-Wall Information Center on the east side of Black Canyon Road, above a wash and near a hill with views of the Providence Mountains. Another site is located about 4 miles further south, near rock piles.

Near Ivanpah and Cedar Canyon Roads: Caruthers Canyon

5.5 miles west of Ivanpah Road on New York Mountains Road, then 1.5 to 2.7 miles north to campsites. High clearance and four-wheel drive recommended; no RVs.

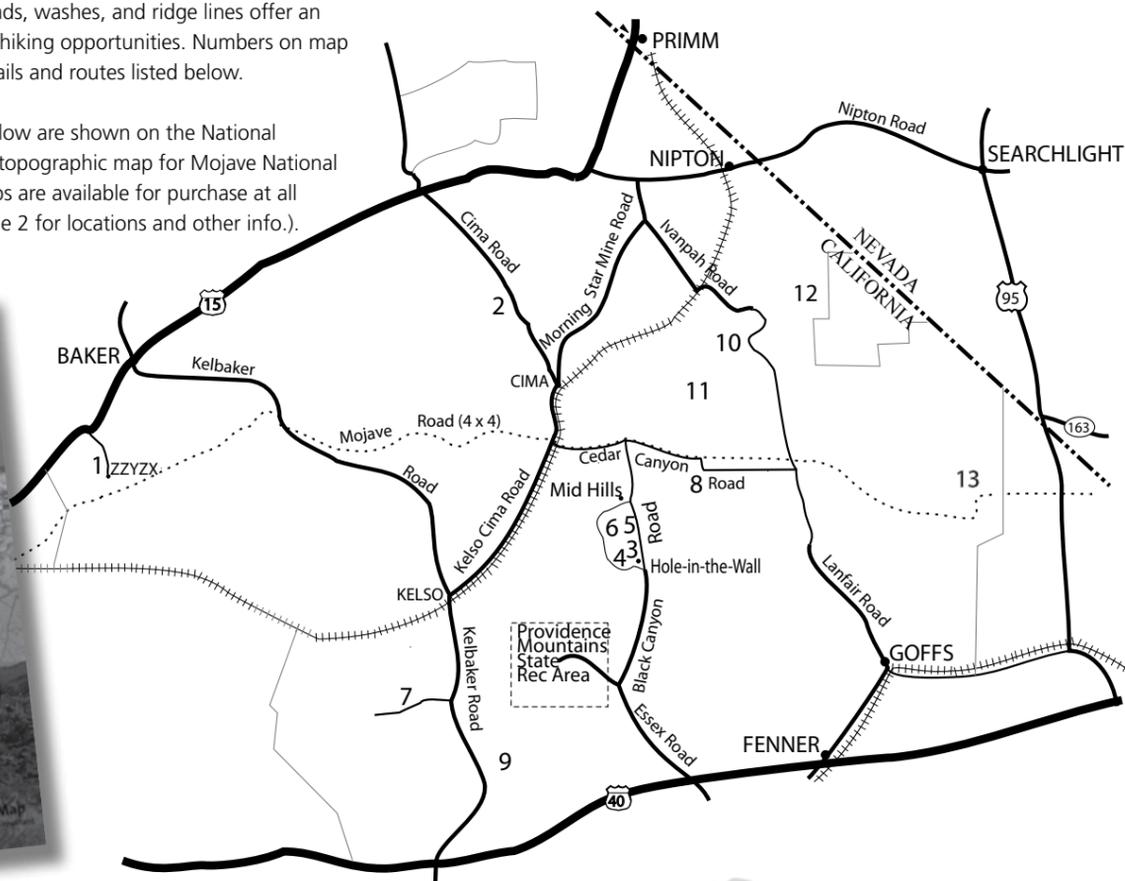
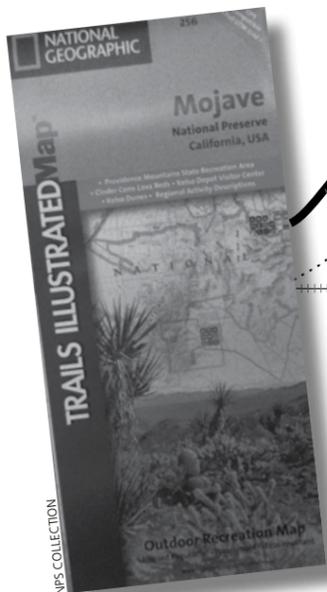


Hiking

Sweeping vistas and opportunities for solitude are a part of every hike in Mojave. Options range from short loop trails to all day cross-country hikes.

Although there are few established hiking trails in Mojave National Preserve, abandoned dirt roads, washes, and ridge lines offer an abundance of cross-country hiking opportunities. Numbers on map show general locations of trails and routes listed below.

All trails and routes listed below are shown on the National Geographic Trails Illustrated topographic map for Mojave National Preserve. This and other maps are available for purchase at all information centers (see page 2 for locations and other info.).



Developed Trails

1) Lake Tuendae Nature Trail

Trailhead: Zzyzx parking area, 5 miles south of I-15 on Zzyzx Road.

Enjoy an easy, self-guided, ¼-mile stroll around Lake Tuendae. Wayside exhibits along the trail reveal the rich cultural and natural history of this oasis on the preserve's western boundary.

2) Teutonia Peak Trail

Trailhead: 12 miles south of I-15, or 5 miles north of Cima, Calif. on Cima Road.

Explore the world's densest Joshua tree forest en route to a rocky peak with expansive views of Cima Dome and beyond. 3 miles round-trip.

3) Hole-in-the-Wall Nature Trail

Trailhead: Hole-in-the-Wall Information Center and Campground, 20 miles north of I-40 on Essex and Black Canyon roads.

Learn to identify desert plants on this easy, ½-mile round-trip hike. Trailheads at Hole-in-the-Wall Information Center and Campground.

4) Rings Loop Trail

Trailhead: Hole-in-the-Wall Information Center parking area, 20 miles north of I-40 on Essex and Black Canyon roads.

Discover how Hole-in-the-Wall got its name as you ascend narrow Banshee Canyon with the help of metal rings mounted in the rock. The 1 mile round-trip hike connects to the Mid Hills to Hole-in-the-Wall Trail (see below).

5) Mid Hills to Hole-in-the-Wall Trail

Trailheads: Entrance to Mid Hills Campground, and about 2 miles west of Black Canyon Road on the south end of Wild Horse Canyon Road.

Hike 8 miles, one-way, through a maze of washes decorated with barrel and cholla cacti, then through the Hackberry Fire burned area. Total elevation gain is 1,200 feet. Watch carefully for trail route markers.

6) Barber Peak Loop Trail

Trailhead: Parking area for walk-in tent sites at Hole-in-the-Wall Campground.

The preserve's newest trail, this 6-mile loop encircles Barber Peak just west of Hole-in-the-Wall Campground, passes the Opalite Cliffs, and returns to Hole-in-the-Wall via Banshee Canyon.

7) Kelso Dunes

Start: 3 miles west of Kelbaker Road on the well-graded, but unpaved Kelso Dunes Road.

Hikers at sunrise and sunset are treated to both cooler temperatures and the rose-colored glow of the dunes. The roughly 3-mile round-trip hike might take several hours as you slog through the sand, then slide down the slopes.

8) Rock Spring Loop Trail

The 1 mile loop trail starts at the Rock House and leads to a well-known watering hole and site of an 1860s military outpost. Trail starts at Rock House, 5 miles east of Black Canyon Road on Cedar Canyon Road.

Recommended Routes

Warning: the routes described below are not established trails; trailheads might be unidentifiable or nonexistent. Check a detailed map or guidebook—available at all information centers—and consult a park ranger for route information.

9) Quail Basin

Start: 12.5 miles north of I-40 on Kelbaker Road, then 1 mile east on an unmarked dirt road. Park at junction with closed dirt road heading south. **High clearance and four-wheel drive recommended.**

Follow the route to the south to a road that loops around a small valley. After walking the loop, return via the same route. The 6.5-mile round-trip route leads past jumbled rocks into a small valley of Mojave yucca and juniper surrounded by granite outcroppings.

10) Keystone Canyon

Start: 18 miles south of Nipton Road on Ivanpah Road, then 2.5 miles west on an unmarked dirt road. Bear left at the first fork, right at the second, then continue to a parking area.

Four-wheel drive recommended.

Hike the deteriorating road into Keystone Canyon, ascending the New York Mountains. Continue cross-country to the top of the ridge for spectacular views. Hike is 3 miles one way.

11) Caruthers Canyon

Start: Primitive campsites in Caruthers Canyon, 5.5 miles west of Ivanpah Road on New York Mountains Road, then 2.7 miles north on unsigned road. **High clearance and four-wheel drive recommended.**

Hike on an abandoned road through a rocky basin. Mine shafts and abandoned structures are on private property. Do not enter or climb on them as they are unstable and dangerous.

12) Castle Peaks Corridor

Start: 4.9 miles east of Ivanpah Road on signed Hart Mine Road; left at fork, then 0.9 miles, left at fork, then 3.4 miles, crossing an earthen berm; left at fork, then 1 mile more to where road ends. **High clearance and four-wheel drive recommended.**

For excellent views of the Castle Peak spires, walk 4 miles one way up the closed road to the ridgetop and beyond into a small canyon.

13) Piute Creek

Start: 9.5 miles east of the junction of Lanfair Valley and Cedar Canyon roads on a dirt utility road, then 0.5 miles north. **High clearance and four-wheel drive recommended.**

Hike 6.5 miles round-trip through colorful Piute Gorge and explore the ruins of Fort Piute, built and manned in the 1860s to protect mail and travelers on the Mojave Road. A perennial stream near the fort, rare in the Mojave, supports riparian plants and animals. Return to your vehicle via an unused trace of the Mojave Road.

Mitchell Caverns to remain closed indefinitely

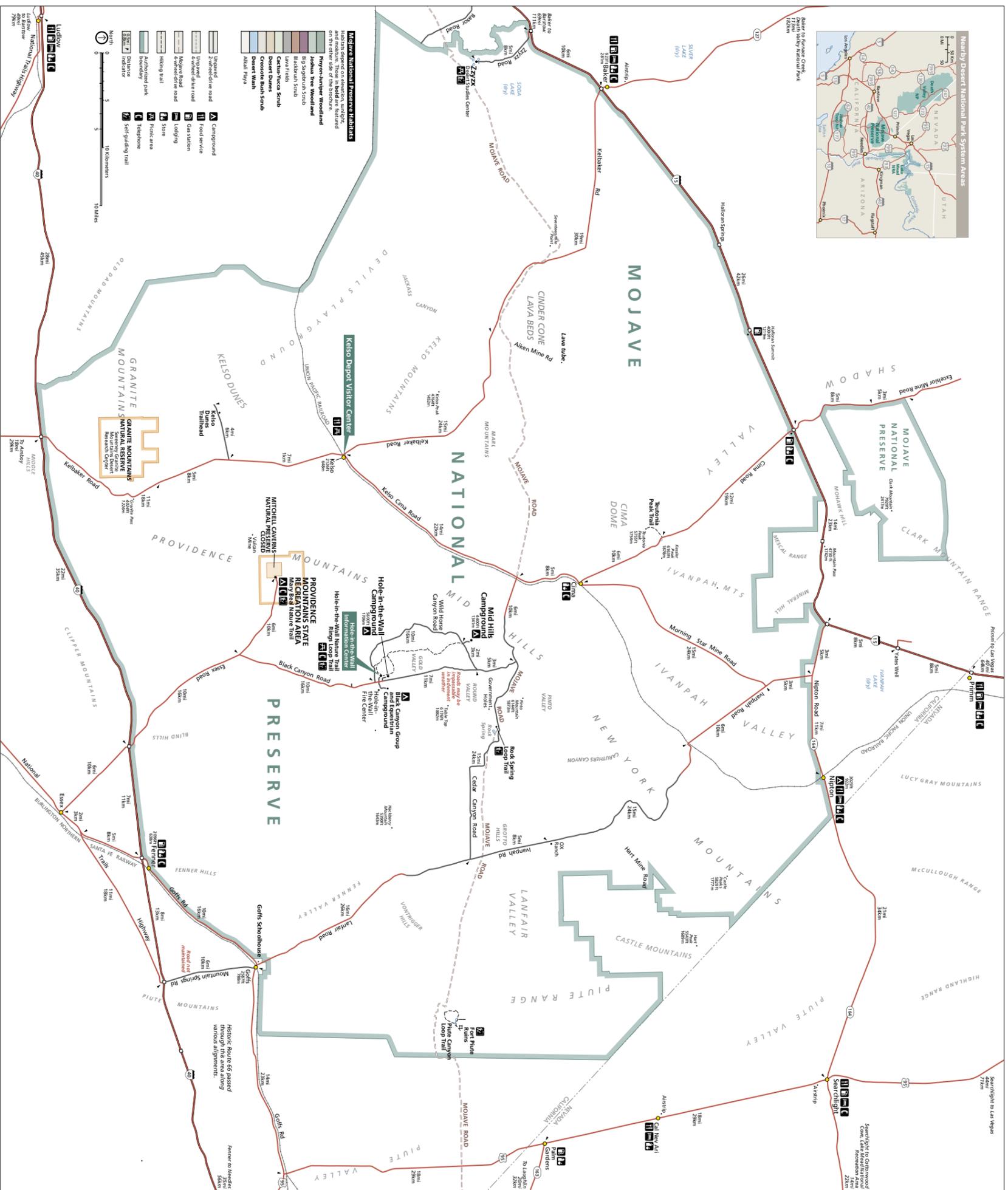
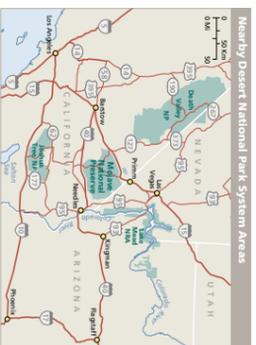
Visitors to Mojave's Hole-in-the-Wall Campground often include a tour of Mitchell Caverns as part of their activities...but no more. State budget problems have forced the shutdown of this beloved desert attraction.

Providence Mountains State Recreation Area, home to Mitchell Caverns, is a California State Park located within the boundaries of Mojave National Preserve. State park officials shut down operations in January 2011. Employee retirements coincided with the development of serious problems with the water system, and state officials decided to temporarily close the park until the system could be repaired.

Meanwhile, shortfalls in the California state budget caused lawmakers in Sacramento to ask that state agencies identify possible budget cuts. In May 2011, California State Parks released its closure list, and Providence Mountains was among the 70 parks included. Although closures for most parks on the list won't go into effect until July 2012, California State Parks officials decided not to invest in repairs to the park's infrastructure during a time of shrinking budgets, so Providence Mountains State Recreation Area remains closed.

Mitchell Caverns was initially developed as a privately operated tourist attraction by Jack and Ida Mitchell in the early 1930s. Jack Mitchell died in 1954, and his family turned the property over to the state. Providence Mountains State Recreation Area was added to the California State Park system in 1956.

Over the years, California State Parks has made many improvements to the caverns, including the development of a safe pathway through the caverns, a tunnel connecting the two principal caves, and installation of a lighting system. However, the caverns' remote location and lack of connection to the electrical grid have contributed to the difficulties in its operation and maintenance. With continuing weakness in the economy and ongoing fiscal issues for California State Parks, the future of Mitchell Caverns remains uncertain.



Telephone Directory

Emergency 911
Federal Interagency Communications Center 909-383-5651
San Bernardino County Sheriff - Baker 760-733-4448
San Bernardino County Sheriff - Needles 760-326-9200

Mojave National Preserve

Barstow Headquarters Office 760-252-6100
Kelso Depot Visitor Center 760-252-6108
The Beanery @ Kelso (lunch room) 760-252-6165
Hole-in-the-Wall Fire Center 760-928-2573
Hole-in-the-Wall Information Center 760-252-6104 or 760-928-2572

Nearby Parklands

Anza Borrego Desert State Park 760-767-4205
Bureau of Land Mgmt. - Barstow Field Office 760-252-6000
Bureau of Land Mgmt. - Needles Field Office 760-326-7000
Calico Ghost Town 760-254-2122
Death Valley National Park 760-786-2331
Joshua Tree National Park 760-367-5500
Lake Mead National Recreation Area 702-293-8990
Providence Mountains State Recreation Area 760-928-2586

Website Directory

National Park Service
Mojave National Preserve www.nps.gov/moja
Death Valley National Park www.nps.gov/dvna
Joshua Tree National Park www.nps.gov/jotr
Lake Mead National Recreation Area www.nps.gov/lame

Providence Mountains State Recreation Area http://www.parks.ca.gov/?page_id=615
Western National Parks Association (bookstore) www.wnpa.org
CSU Desert Studies Center (Zzyzx) <http://biology.fullerton.edu/dsc/>
Bureau of Land Management www.blm.gov
Sweeney Granite Mtns. Desert Research Ctr. <http://nrs.ucop.edu/Sweeney-Granite.htm>
DesertUSA willflower reports www.desertusa.com/willflower/wildupdates
Desert Tortoise data and information www.deserttortoise.gov
Desert Discovery Center www.discoverytrails.org/welcome1.html
Wilderness information www.wilderness.net
California Desert www.californiadesert.gov
Leave No Trace www.lnt.org
US Federal government jobs www.usajobs.opm.gov



WESTERN NATIONAL PARKS ASSOCIATION

