

JOSHUA TREE *journal*

Spring-Summer 1992

Activities Information Regulations

Free

Welcome

to Joshua Tree National Monument, a spectacular place of desert beauty and unusual diversity. This area was set aside in 1936 to preserve a representative and scenic portion of the Mojave and Colorado deserts for the benefit and enjoyment of present and future generations.

To limit the impact of over a million visitors a year, we need your help. Please pick up litter and watch wildlife from a distance without feeding them. If you observe historic or prehistoric artifacts, please only look and enjoy. Do not touch, move, or collect these items. They are not only for your enjoyment, but also for that of future generations. Tour the park safely and with sensitivity for other visitors and for the plants and animals for whom this park may be their only home.

As you visit Joshua Tree National Monument this season, we hope you take advantage of our programs that help you better understand the desert and this very special place. Please look for scheduled programs, hikes, and special events posted on bulletin boards throughout the park. We think you will appreciate your visit more by a better understanding of your surroundings.

Whatever your reason for coming here, we hope you are rewarded by what you see, hear, touch, or smell.

Do you have any concerns or ideas for improving your national monument? Let us know what you enjoyed about the monument too. Please drop a note to: Superintendent, Joshua Tree National Monument, 74485 National Monument Drive, Twentynine Palms, CA 92277.

Dave Moore, Superintendent

Wildflowers-When and Where

Bill Truesdell
Chief Naturalist

The extent and timing of the spring wildflower blooms in the California deserts may vary greatly from one year to the next. Fall/winter precipitation and spring temperatures are key environmental factors affecting the spring blooming period.

Normally, desert annuals germinate between September and mid-January and flower during the following spring. Many need a good soaking rain to get started. What blooms in spring depends on when precipitation falls. September and October rains favor certain species, while later rainfall favors others.

If normal rainfall has occurred, spring flowering begins as temperatures rise—at lower elevations in February and at higher elevations in March and April. On mountain tops above 5,000 feet (1,524 meters) blooms are as late as June. How long the blooming period lasts is dependent on heat. As daytime temperatures increase the flowers dwindle.

Rainfall this year through the beginning of March totaled close to 4 inches (10.2 cm) at the headquarters, the most abundant for many years.

Many of the winter storms brought gentle rains that soaked in rather than running off.

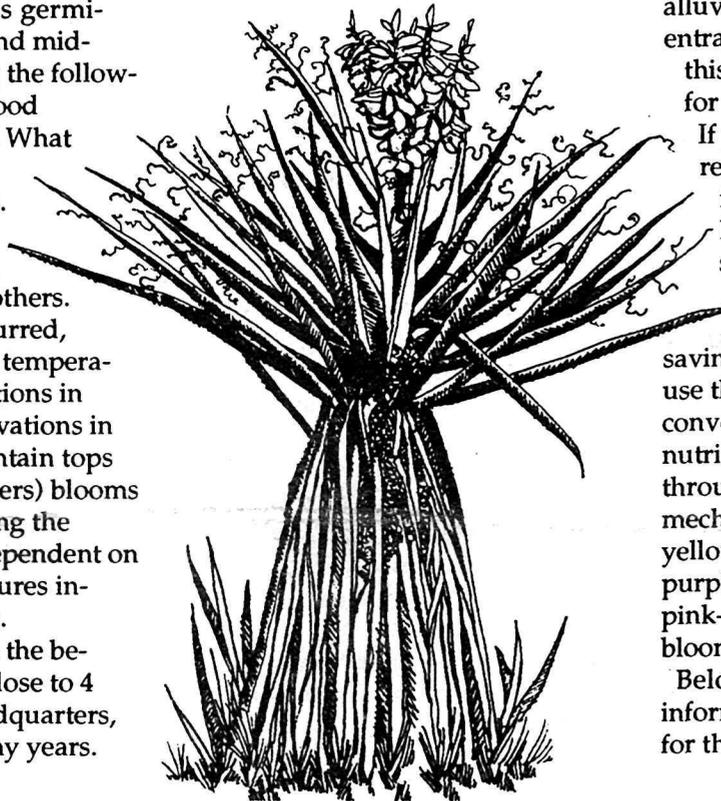
An early indication that spring wildflowers could be expected in abundance this year was the carpeting of green in many monument loca-

tions. Leaf rosettes were up out of the ground in early February, waiting for the warmer weather that would trigger sending up flower stalks. By early March scattered desert dandelions, desert poppies, lupines, and other spring annuals were dotting the alluvial fan south of the Cottonwood entrance. A spring visit to the desert this year could be very rewarding for wildflower seekers.

If you miss spring wildflowers, remember the desert can often be in flower year round. A more highly specialized group of summer annuals often covers the ground in the high desert.

They have developed a water saving mechanism allowing them to use the sun for photosynthesis, the conversion of solar energy into plant nutrients, without losing moisture through evaporation. This adaptive mechanism allows plants such as the yellow-flowered chinch-weed, the purple-stalked amaranth, and the pink-to red-flowered windmill to bloom during intense summer heat.

Below is a chart giving more information about flowering seasons for the California deserts.



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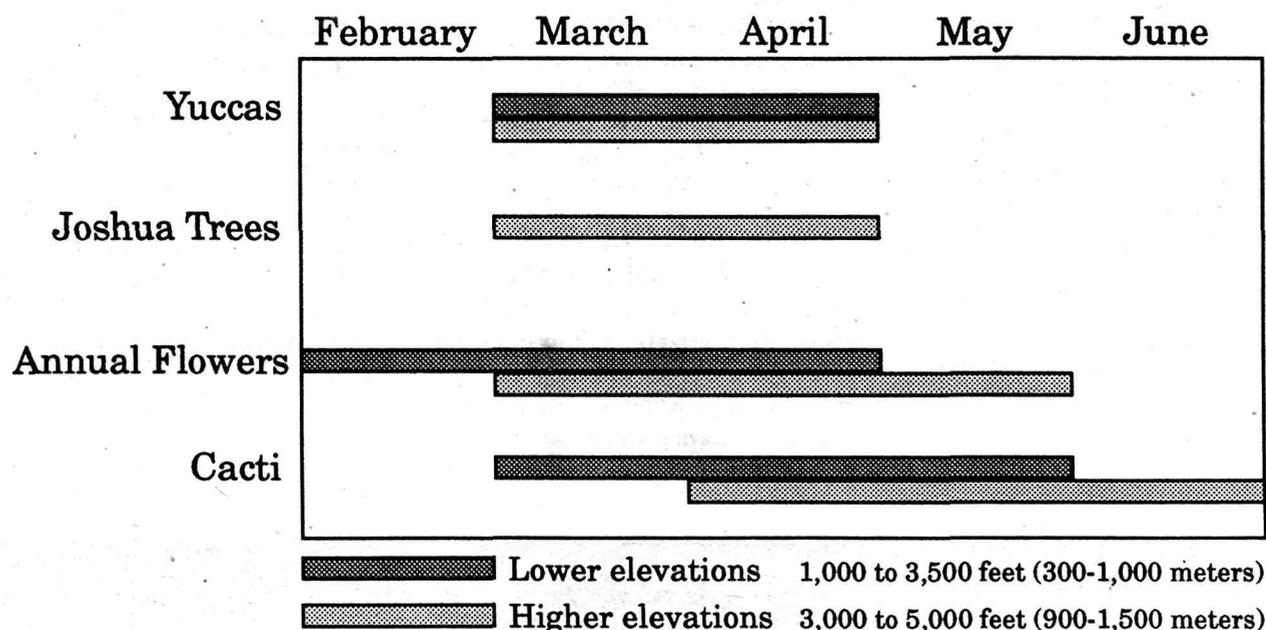
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For Our International Visitors

Park information in Dutch (**nederlands**), French (**français**), German (**Deutsch**), and Japanese (日本語) is available in the visitor centers.

Flowering Seasons

Within altitude range



For latest wildflower information call **Wildflower Hotline** at (818)768-3533.

The wildflower hotline is provided by the Theodore Payne Foundation for Wildflowers and Native Plants.

What to See and Do

For the first-time visitor the desert may appear bleak and drab. On closer examination the desert is actually full of fascinating and unique living systems interwoven together. A rich cultural history and surreal geologic features add allure to the desert. The monument offers the visitor endless opportunities for exploration and discovery. Depending on the number of hours you want to spend and your interest, here are some ideas to help you plan your visit.

IF YOU HAVE FOUR HOURS OR LESS, begin your visit at a park visitor center. The Oasis Visitor Center in Twentynine Palms is open 8 a.m. to 4:30 p.m. daily except Christmas. The Black Rock Canyon and Cottonwood visitor centers are open daily 8 a.m. to 4 p.m. except for Christmas and occasional closures due to staff shortages. Park brochures and newspapers, cultural and natural history exhibits, and specific information are available at the visitor centers.

With limited time you may want to confine your sightseeing to the main park roads.

Many pullouts with wayside exhibits dot the park roads. Another article on page 4 lists nature trails and short walks located throughout the monument. Consider experiencing at least one of these walks during a short park visit.

IF YOUR PLAN TO SPEND AN ENTIRE DAY, be sure to include several nature trails in your schedule. If you are in the park mid-October to mid-December or mid-February through mid-May, plan to participate in ranger-led programs Fridays through Sundays. Check at the visitor centers and the bulletin boards in the campgrounds for program listings. These presentations will add enjoyment and understanding to your visit.

If solitude is what you are after, plan an all-day hike. Obtain hiking maps and trail information from the visitor centers. The desert, fascinating as it is, can be life-threatening for those unfamiliar with its potential dangers. Be sure to review "Desert Safety Check List" on page 8 before you go hiking. Remember, dogs are not allowed more than 100 yards (90 meters) from any road, campground, or picnic area.

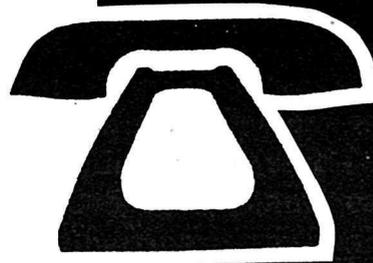
Some visitors like to experience the desert from the seat of a mountain bike. Bicycles are considered vehicles and are not allowed anywhere off roads. They are not allowed on trails, service roads, or any other roads closed to vehicle traffic. Refer to mountain biking article on page 8 for more information.

Joshua Tree National Monument has gained international attention as a superb rock-climbing area. Many visitors flock to the park to climb or to watch the rock climbers in action.

WITH MORE THAN ONE DAY IN THE PARK, more options are available. There are nine campgrounds and backcountry camping is permitted. You will find information concerning camping and backcountry use on page 3 and 5 respectively.

Books and topographic maps available at park sales areas give information needed for longer hikes. For "peak baggers," the monument has ten mountains over 5,000 feet (1524 meters) in elevation. Or make it your goal to hike to all the park oases. Other trails lead you to remnants of the gold mining era, a colorful part of the monument's cultural history.

Whatever your choice of activity, your time at Joshua Tree will be well spent. The desert holds much more than what is readily apparent to the casual observer.



IN CASE OF EMERGENCY,

contact any park ranger, dial 911, or call collect to the 24-hour Dispatch

Center - (714) 383-5651. These numbers are **FOR EMERGENCY ONLY**. Pay phones are located at the Visitor Centers in Twentynine Palms and Black Rock Canyon. You can also find pay phones in the town of Joshua Tree, at the Indian Cove Market, and at Chiriaco Summit (12 miles southeast of Cottonwood).

Some Park Regulations And Why

National parks and monuments are protected.

Plants and animals removed from their unique environments soon perish.

Removal, disturbance, destruction, and disfigurement of anything is prohibited. This will permit those who come in the future to enjoy this park as you have.

Feeding of wildlife is prohibited.

Feeding coyotes, ground squirrels, and other animals weans them from their natural food supplies, causes overpopulation problems, and turns them into dangerous creatures as they lose their fear of humans. **Keep the wildlife wild.**

State and federal vehicle laws apply in the monument.

Park roads are narrow and winding. Some areas are congested. The vehicle laws and speed limits are there for your own safety and well being.

Pets must be on a leash at all times. They are prohibited on trails and beyond 100 yards (90

meters) from any road, campground, and picnic area.

The sight of your pet, the noises it makes, and the scents and waste products it leaves behind can disrupt the natural wildlife community and reduce the survival of some of its inhabitants. Some pets are considered delicacies by local predators. Your pet may also be an annoyance to other visitors.

All vehicles, including bicycles, are prohibited off established roads.

The desert ecosystem is fragile. Vehicle tires destroy vegetation. Off-road driving or riding creates ruts, upsetting the delicate drainage patterns, compacting the soil, and leaving visual scars for

years. Plants are crushed and uprooted. Wildlife homes and shelters are destroyed, and their food and water supplies are altered or obliterated.

Collecting any vegetation, living or dead, is prohibited. Fires are limited to campground and picnic area fireplaces.

Gathering native vegetation or building fires outside designated fireplaces creates fire hazards and radically alters the appearance and life cycle of the desert. Desert vegetation grows slowly and depends on recycling decomposed organic material for survival. Ashes remaining from a fire take years to disappear, meanwhile spoiling the sight

other visitors may have traveled a thousand miles to enjoy.

Dispose of all your trash properly.

The dry desert climate cannot quickly decompose paper, aluminum, glass, and other litter.

Certain areas within the monument are designated as restricted or day use only.

Entering restricted areas is prohibited. Some areas are privately owned; others protect wildlife or historical sites. Day use areas are set aside to protect sensitive populations of wildlife. They are closed from dusk to dawn.

Prospecting, including the use of metal detectors, is prohibited.

These practices remove formations other visitors would enjoy seeing, disturb plants and animals, and scar the landscape.

Firearms, fireworks, traps, bows and arrows, BB guns, and slingshots are not allowed.

Federal law requires you to wear seat belts

when driving in a national park

 Campgrounds	Elevation		Number of Sites		Number of Sites		Fee/night		Water		Chemical Toilets		Flush Toilets		Tables		Fireplaces		Dump Station		Horses Permitted		Remarks
	Individual/Family	Group (Reservation required)	Per group site=g	Per individual/family site=i																			
Belle	3,800' 1,158 m	17							•		•	•											
Black Rock Canyon	4,000' 1,219 m	100			\$10/i			•		•	•	•	•	•	•								Campsite No.62 is wheelchair accessible ♿
Cottonwood	3,000' 914 m	62	3		\$8/i \$15/g			•		•	•	•	•	•									Group site No.2 is wheelchair accessible ♿
Hidden Valley	4,200' 1,280 m	39							•		•	•											
Indian Cove	3,200' 975 m	107	13		See remarks				•		•	•											Group sites 1,2 \$30/night Group sites 3-13 \$15/night
Jumbo Rocks	4,400' 1,341 m	130							•		•	•											Campsite No.46 is wheelchair accessible ♿
Ryan	4,300' 1,310 m	29							•		•	•											
Sheep Pass	4,500' 1,371 m		6		\$10/g				•		•	•											
White Tank	3,800' 1,158 m	15							•		•	•											

- Showers are not available. There are no hookups for recreational vehicles.
- Bring your own water. If you run out of water, it is available at the Oasis Visitor Center in Twentynine Palms, Indian Cove Ranger Station, and Black Rock Canyon and Cottonwood campgrounds.
- Bring your own firewood and kindling. All vegetation in the monument is protected.
- Campfires are allowed in designated firepits only.
- Two cars and up to six people are allowed at each individual/family campsite. Group site capacity ranges from ten to seventy people.
- Quiet hours are from 8 p.m. to 7 a.m. This includes generators and motors.
- Obtain reservations for individual/family sites at Black Rock Canyon and all group sites by calling 1-800-365-2267. All other campgrounds are first come, first served—it is wise to arrive as early as possible.
- There is a 14-day camping limit from September through May and a 30-day limit from June through August.
- Belle and Ryan campgrounds are usually closed during the summer when the park is less crowded.
- When in doubt, ask a ranger.

Be an inspiration to the others. Leave your campsite as clean or cleaner than when you found it.

<h2 style="text-align: center;">HIKING TRAILS IN JOSHUA TREE NATIONAL MONUMENT</h2> <p style="text-align: center;">FOR INFORMATION ON OTHER HIKES IN THE PARK PLEASE REFER TO PUBLICATIONS AVAILABLE AT PARK SALES AREAS</p>				
Trail	Round-trip Mileage	Time	Starting Point	Trail Description/Rating
Boy Scout	15.6 miles (25.1 km)	1-2 days	Indian Cove backcountry board or Keys West backcountry board 0.5 mile (0.8 km) east of Quail Springs picnic area.	Scenic Trail through the westernmost edge of the Wonderland of Rocks. See backcountry article on page 5 for information on overnight use. Moderate.
49 Palms Oasis	3 miles (4.8 km)	2-3 hours	Parking area at end of Canyon Road, 4 miles (6.4 km) west of Twentynine Palms off Highway 62.	Several stands of fan palms, evidence of past fires, and pools of water are found at the oasis. Moderately strenuous.
Lost Horse Mine/Mountain	4 miles (6.4 km)	3-4 hours	Parking area 1.2 miles (1.9 km) east of Keys View Road.	Site of ten-stamp mill and foundations. Summit elevation, 5278 feet (1,583 meters). Moderately strenuous.
Lost Palms Oasis	7.5 miles (11.2 km)	4-6 hours	Cottonwood Springs Oasis or Campground.	A canyon with numerous palm stands. A side trip to Victory Palms and Munsen Canyon involves boulder scrambling. Moderate to oasis overlook, then strenuous.
Mastodon Peak	3 miles (4.8 km)	2 hours	Cottonwood Springs Oasis or Campground.	Excellent views of the Eagle Mountains and Salton Sea. Summit elevation, 3,371 feet (1,011 meters). Moderate.
Ryan Mountain	3 miles (4.8 km)	2-3 hours	Ryan Mountain parking area or Sheep Pass Campground.	Excellent views of Lost Horse, Queen, and Pleasant valleys. Summit elevation, 5461 feet (1,638 meters). Strenuous.

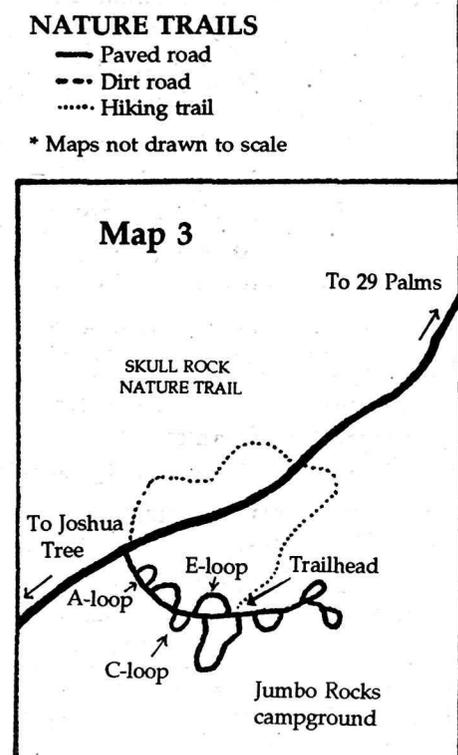
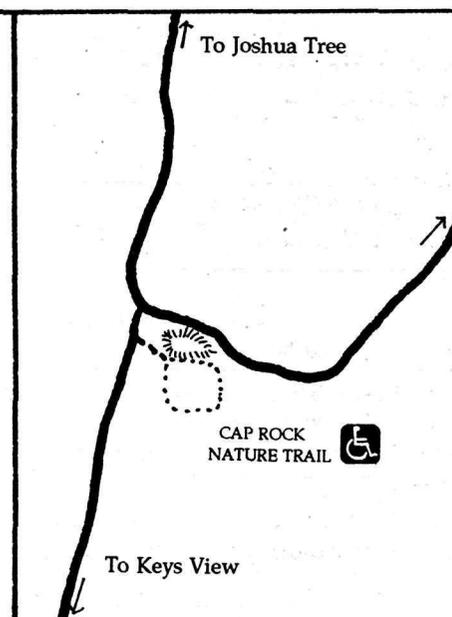
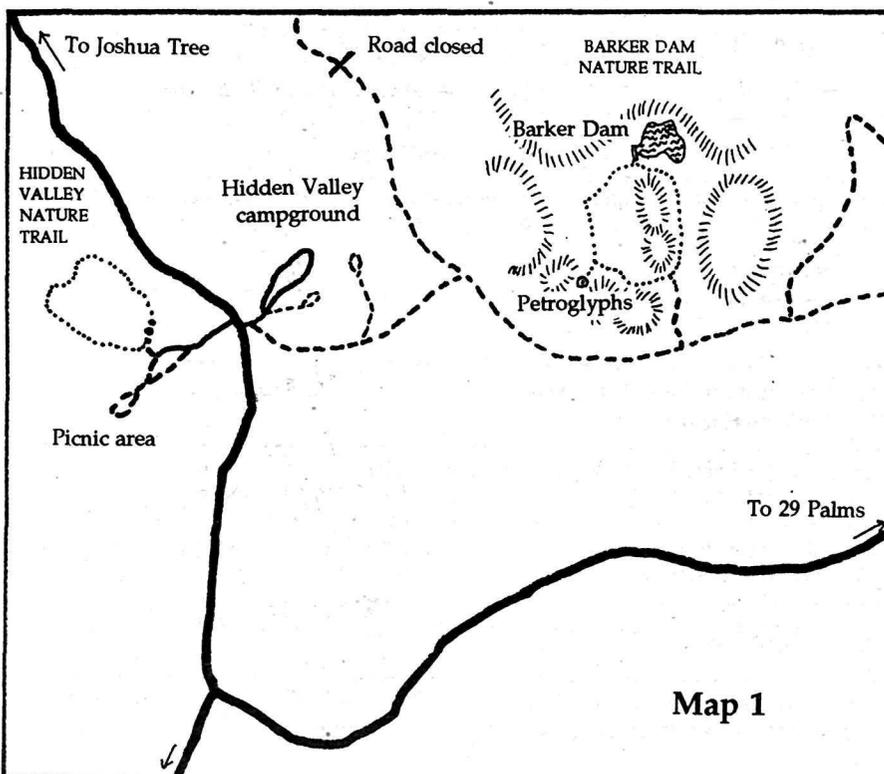
Thirty-five miles of the California Riding and Hiking Trail pass through the monument. Access to the trail is available at its junction with Covington Flats, Key's View, and Squaw Tank (Geology Tour) roads; at Ryan Campground; and at two other junctions, near Skull Rock and north entrance. This allows for shorter hikes of 4, 6.7 or 11 miles (6.4, 10.7, or 17.6 km). Two to three days are required to hike the entire length of the trail.



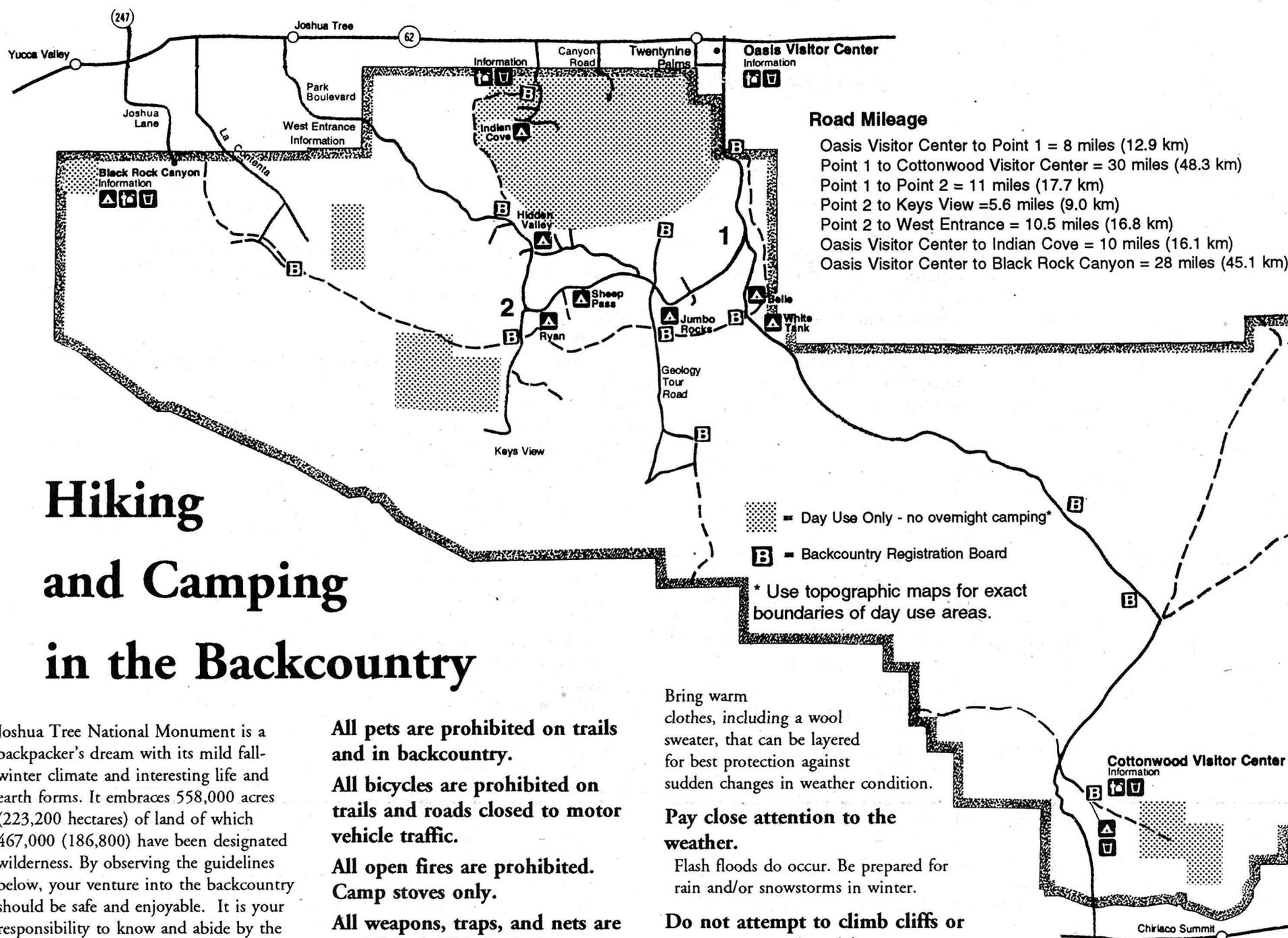
NATURE TRAILS

Short walks, most with informational signing
Watch for sign shown at left

Trail	Mileage	Starting Point	Trail Highlights
Arch Rock	0.3-mile (0.5-km) loop	White Tank Campground, opposite site 9	Signs along the trail interpret the geology of the area and the natural creation of an arch.
Barker Dam (See map 1 below)	1.1-mile (1.8-km) loop	Enter the Hidden Valley Campground and follow the dirt road that goes off to the right. Follow the signs to the parking area.	The loop trail brings you to Barker Dam, built to collect water for the cattle of early ranchers. The trail back to the parking lot takes you past Native American petroglyphs. These authentic carvings were unfortunately painted over by a film crew in an attempt to make them more visible.
Cap Rock (See map 2 below) 	0.4-mile (0.6-km) loop	Cap Rock parking area, southeast of Hidden Valley Campground at the junction with Keys View Road.	The paved trail leads you past fascinating rock formations, with signs interpreting the geology and plants of the Mojave Desert.
Cholla Cactus Garden	.25-mile (0.4-km) loop	Point of interest 9 on the park brochure map. On the main park road, 20 miles (32.0 km) north of the Cottonwood Visitor Center.	The trail travels through an unusually dense concentration of Bigelow cholla. A brochure, available at the start of the trail, helps you pick out the well-camouflaged homes of pack rats inhabiting the garden, as well as other wildlife and vegetation characterizing the Colorado Desert.
Cottonwood Springs	1-mile (1.6-km)	Cottonwood Campground, sites 13A and 13B (north end) or Oasis parking lot (south end).	Signs interpret the plants and animals of the Colorado Desert as the trail travels through rolling hills on its way to the Cottonwood Springs Oasis.
Hidden Valley (See map 1 below)	1-mile (1.6-km) loop	Hidden Valley picnic area, point of interest 3 on the park brochure map.	The trail, which involves some easy boulder scrambling, takes you into a rock-enclosed valley rumored to have been used as a hideout for cattle and horse rustlers in the late 1800's.
High View	1.3-mile (2.1-km) loop	South Park parking area, to the northwest of Black Rock Canyon Campground.	The view from the top, near Summit Peak (elevation 4,500 feet or 1,372 meters), makes this hike well worth its moderately steep, 300-foot (90-meter) elevation gain. A brochure, describing the flora and scenery along the trail, is available at the Black Rock Canyon Visitor Center.
Indian Cove	0.6-mile (1.0-km) loop	West end of Indian Cove Campground.	This easy trail follows a wash for most of the walk. Watch for desert tortoises, as Indian Cove is a favorite habitat area. If you do spot one, please observe it quietly from a distance. Tortoises are protected by state and federal law.
Keys View	0.25-mile (0.4-km) loop	Keys View, point of interest 6 on park brochure map.	This outstanding scenic point gives a superb sweeping view of the valley, mountains, and desert from its elevation of 5195 feet (1,558 meters).
Oasis of Mara 	0.5-mile (0.8-km) loop	Oasis Visitor Center, Twentynine Palms.	The Oasis was once a popular gathering place for several tribes of Native Americans, including the Serrano, Cahuilla and Chemehuevi. This easy, paved trail is a good introduction to the monument.
Skull Rock (See map 3 below)	1.7-mile (2.7-km) loop	Jumbo Rocks Campground, beyond Loop E entrance.	Interpretive signs guide you through boulder piles, desert washes, and a rocky alleyway. The trail crosses the road and loops back to the campground entrance.



NATURE TRAILS
 — Paved road
 - - - Dirt road
 Hiking trail
 * Maps not drawn to scale



Hiking and Camping in the Backcountry

Joshua Tree National Monument is a backpacker's dream with its mild fall-winter climate and interesting life and earth forms. It embraces 558,000 acres (223,200 hectares) of land of which 467,000 (186,800) have been designated wilderness. By observing the guidelines below, your venture into the backcountry should be safe and enjoyable. It is your responsibility to know and abide by the park regulations. If you have any questions, ask a ranger.

All overnight users must register at a backcountry board before entering the backcountry.

The map on this page indicates the location of the twelve backcountry boards. Follow the instructions for self-registration. Unregistered vehicles or vehicles left overnight anywhere other than at a backcountry board are subject to citation and/or towing.

All wilderness camping must be at least one mile (1.6 km) from any road and 500 feet (150 meters) from trails. Camping is prohibited in day-use areas and at any natural or man-made water source, including springs, seeps, dams, and tanks. Campsites must be 1/4 mile (400 meters) from water sources.

The same map shows the general location of each day-use area. It is your responsibility to know the exact day-use area boundaries. Contact a ranger if in doubt. Camping in washes is not recommended because of potential flash flood dangers.

All pets are prohibited on trails and in backcountry.

All bicycles are prohibited on trails and roads closed to motor vehicle traffic.

All open fires are prohibited. Camp stoves only.

All weapons, traps, and nets are prohibited. This includes possessing, using, discharging, or carrying.

Pack out all garbage.

Buried trash will be dug up by animals and scattered by the wind creating an unappetizing sight. Bury human waste in holes at least six inches (15 cm) deep and pack out toilet papers in a zip-lock bag.

Carry a minimum of one gallon (3.8 liters) of water per person per day

Carry two gallons (7.6 liters) per person in hot weather or if planning a strenuous trip. Carry additional water for cooking and personal hygiene.

Carry a topographic map and compass. Know how to use them.

Include in your gear plastic garbage bags or raincoat, flashlight, mirror, whistle, first-aid kit, pencil and paper, pocket knife, and extra food. Do not use freeze-dried food unless you plan to carry extra water to use for cooking.

Dress for the weather.

Temperature drops of 40°F (22°C) in a 24-hour period are common in the desert. Wear a hat, sunglasses, and sturdy boots. Use sunblocking lotion liberally.

Road Mileage

- Oasis Visitor Center to Point 1 = 8 miles (12.9 km)
- Point 1 to Cottonwood Visitor Center = 30 miles (48.3 km)
- Point 1 to Point 2 = 11 miles (17.7 km)
- Point 2 to Keys View = 5.6 miles (9.0 km)
- Point 2 to West Entrance = 10.5 miles (16.8 km)
- Oasis Visitor Center to Indian Cove = 10 miles (16.1 km)
- Oasis Visitor Center to Black Rock Canyon = 28 miles (45.1 km)

☐ = Day Use Only - no overnight camping*

☐ = Backcountry Registration Board

* Use topographic maps for exact boundaries of day use areas.

Bring warm clothes, including a wool sweater, that can be layered for best protection against sudden changes in weather condition.

Pay close attention to the weather.

Flash floods do occur. Be prepared for rain and/or snowstorms in winter.

Do not attempt to climb cliffs or any steep terrain without adequate equipment and training. Accidents can be fatal.

The following is prohibited: Possessing, destroying, disturbing, injuring, defacing, removing, and digging from its natural state

- a. Living or dead wildlife.
- b. Plant or plant parts, both living and dead.
- c. Non-fossilized or fossilized specimens.
- d. Mineral resources such as stones, sand, rock formations, and mineral elements.
- e. Any archaeological or historic site or structure, including mines and mining areas.

All stock animals are subject to the following restrictions for resource preservation and the enjoyment of others:

- a. No overnight backcountry camping without special permit.
- b. No grazing permitted.
- c. No stock animals within 1/4 mile (400 meters) of any natural or man-made water sources, including springs, seeps, dams, or tanks.

- d. All stock animals must stay on marked trails and washes to minimize vegetation damage, and soil erosion, compacting, and rutting.
- e. Only Ryan and Black Rock campgrounds are equipped with facilities for overnight camping with stock animals.
- f. All stock animals are restricted to pellet form of feed in the backcountry.
- g. No horses on the Hidden Valley, Barker Dam, or Ryan Mountain trails.
- h. No riding in the open desert, except in washes.



Volunteers In Parks

George Lawrence
Park Volunteer

The U. S. Department of the Interior, later through the National Park Service, has been responsible for maintaining our national parks since 1872, when Yellowstone National Park was created. Today, this monumental task encompasses some 358 parks, historic sites, monuments, seashores, memorials, battlefields, scenic rivers, and recreational areas within the 50 states of the nation and its territories.

Assisting the National Park Service in maintaining these special parcels of land for future generations is a unique group of Volunteers in Parks, or VIPs. Armed with varied talents and much needed skills, these volunteers join hands with the Park Service in meeting its challenging mission of "conserving the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

The VIPs come from all walks of life: high school and college students, retired couples, business executives, farmers, scientists, lawyers, doctors, and artists. Regardless of their background, they share one common characteristic and one common goal: they have talents and skills that can be utilized by the National Park Service and they give of themselves for the

benefit of others and future generations. The VIPs can be found answering questions at a visitor center, writing brochures, serving as campground hosts, driving buses, performing maintenance tasks, answering phones, conducting programs, maintaining trails, or preparing correspondence.

According to Art Webster, the VIP coordinator at Joshua Tree National Monument, over 138 volunteers throughout the year lend their expertise to the park. Dave Moore, Superintendent of Joshua Tree National Monument, refers to VIPs as "the backbone of the National Park System." He has been an advocate of the VIP program since its inception in the early 1970s, when many parks failed to receive sufficient funding to meet all of their annual operation requirements and needs.

Superintendent Moore commented that his staff is presently supplemented by the equivalent of ten percent of the total park's employees with VIPs, and that these unpaid personnel provide "the oil to make this park system machine run."

He asked this reporter where I might find people in industry who never watch the time clock, always go above and beyond what is expected, and even work on their days off. "Just look around!" he exclaimed. "We have

the VIPs providing park training, giving educational programs, restoring historic structures, building trails, surveying archaeological sites, operating computers, running libraries, and who knows what else. I don't know what I'd do without them," stated Superintendent Moore.

Who are these special people known as VIPs? Dave and Marleen Bell, full-time RV people from Houston, Texas, work at the headquarters of Joshua Tree National Monument. When asked why they want to work as volunteers for a national park, Marleen explained, "All our lives we have enjoyed visiting national parks and now we have a chance to pay back our park system for being so kind to us."

Harmon and Nelda King of Salt Lake City, Utah, are full-time VIPs working six months a year as campground hosts at Zion National Park in Utah and six months here at Joshua Tree National Monument in one of the most secluded jobs available.

They camp out in their motor home at the Keys Ranch, where they perform a variety of duties from ranch restoration to archaeological site evaluation. They seldom see anyone and their only link with the rest of the park is through radio transmission. When asked about the seclusion of their lifestyle, they began to talk about the Native Americans who lived in the

area over 200 years ago or the deer who grazed in their front yard that morning. No, they were not lonely. They have a ringside seat on an important piece of Joshua Tree history, the Keys Ranch, and they are glad to be a part of it.

VIP Lore Lawrence has an entirely different reason for wanting to be part of the VIP scene. Born near Stuttgart, West Germany, she came to the United States some 35 years ago from a country which does not have national parks, and she saw volunteering as a way of saying "thank you" to her adopted country. Lore can be found several days a week at the Cottonwood visitor center talking to the German visitors in their native tongue about Joshua Tree National Monument and what there is to see and do in the park.

Watching the VIPs working alongside the park personnel, I detected a feeling of mutual respect from both factions. Wearing the grey and green uniforms of the National Park Service and the tan and brown uniforms of a VIPs, park employees and volunteers work together towards a common goal—that of making Joshua Tree National Monument a credit to the National Park Service and to the local communities surrounding it.

Coyote Quiz

Rick McIntyre, Park Ranger

- An average Joshua Tree coyote weighs...
 - 20 lbs
 - 35 lbs
 - 50 lbs
- Average territory size is...
 - 1 square mile
 - 10 square miles
 - 100 square miles
- Who is the fastest?
 - coyote
 - jackrabbit
 - roadrunner
- Who is the slowest?
 - coyote
 - jackrabbit
 - roadrunner
- The Cahuilla tribe word "easil" means coyote as well as...
 - a lazy person
 - one who doesn't learn from his mistakes
 - an anthropologist
 - all of the above
- In the last century, coyote range in North America has...
 - increased
 - decreased
 - stayed the same
- Coyote can interbreed with dogs and wolves.
 - true
 - false
- If a coyote ate only jackrabbits, how many would it need per year?
 - 50
 - 75
 - 150
- Do coyotes form packs?
 - yes
 - no
 - sometimes
- In roadrunner cartoons, coyote's first name is...
 - Cary
 - Carlos
 - Wiley

(For answers see this page.)

Help Us Fight Vandalism

Joshua Tree National Monument needs your active participation for the protection and preservation of the numerous superb yet fragile natural and cultural resources. If you observe damage, please report it immediately. If you witness vandalism in progress, please write down the **license plate number of vehicles** near the scene, descriptions of **people involved**, the **location** and **what is occurring**, and report at once to the nearest ranger, visitor center, or entrance station. If you spot vandalism or disorderly conduct after hours, please go to the nearest phone and call the **San Bernardino Dispatch Center** (call collect for emergencies) at (714)383-5651. You can also dial **911** in emergencies.

IMPORTANT: Do Not attempt to take action yourself. Let the park rangers do their jobs.

Answer to Puzzle:

- w(a)xy
- (d)ormant
- h(a)irs
- s(p)ines
- roo(t)s
- le(a)ves
- s(t)ore
- rad(i)ating
- fo(o)d
- (n)octurnal

Answers to Quiz:

- a
- a
- b
- c
- d
- a
- a
- b
- c
- c

**Think Globally,
Act Locally.**

**REDUCE
REUSE
RECYCLE**

Joshua Tree
National Monument
supports recycling:

- Drop off aluminum cans, glass, and recyclable plastics (types 1 & 2 only) at the Visitor Center in Twentynine Palms.
- Share or recycle this *Joshua Tree Journal* when you are finished reading it.
- Participate in recycling programs in your community.



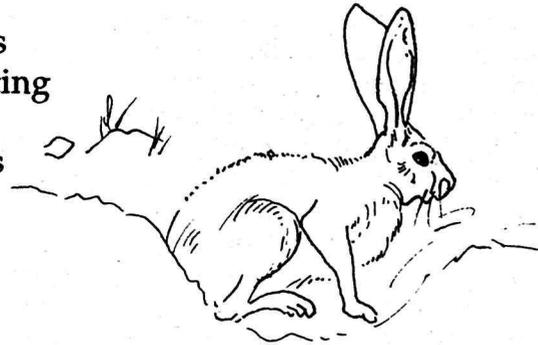
Children's World

by Nancy Shade, Environmental Education

Learning to Survive—A Puzzle

Use the sentence clues below to find the words to this puzzle.
The outlined word is the key to wildlife survival.

store spines
waxy radiating
nocturnal roots
hairs leaves
dormant food



1. — () —
2. — () —
3. — () —
4. — () —
5. — () —
6. — () —
7. — () —
8. — () —
9. — () —
10. — () —

1. Some plants have a _____ coating to cut down on loss of moisture.
2. Others have seeds that stay in the ground asleep, or are _____ until its rains.
3. Often stems and leaves are covered with fine _____ that give shade.
4. Sharp _____ on cactus keep many animals from eating them.
5. Plants grow far apart so their _____ can spread out and soak up more rain.
6. _____ and flowers grow on some plants only when there is enough rain or moisture.
7. Beavertail and barrel cacti have thick stems that can expand and _____ water.
8. A rabbit's big ears pick up sound and also help cool by _____ heat.
9. Some animals never drink water. They get moisture from the _____ they eat.
10. Other animals stay cool and save moisture by coming out at night. They are _____.

(See page 6 for the solution to the puzzle.)

JOIN THE JOSHUA TREE NATURAL HISTORY ASSOCIATION

The Joshua Tree Natural History Association, a non-profit support group, was established in 1960 to provide much needed financial and volunteer support to Joshua Tree National Monument. The association assists the National Park Service in the area of visitor assistance, environmental education programs for children, and outdoor classes and tours. The membership fees and the proceeds from sales of maps and publications enable the association to purchase equipment and supplies for the park interpretive programs. As an association member you will receive:

- A membership card
- A 10% discount on all publications sold by the association

To join the association, fill out and mail this form with a check or money order for \$8.00 or a \$5.00 renewal fee to:

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Twentynine Palms, CA 92277-3597

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<input type="checkbox"/> Joshua Tree: Desert Reflections	\$3.00
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<input type="checkbox"/> Desert Survival Handbook	\$4.50

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Matt Riley's Fatal Mistake

Rick McIntyre
Park Naturalist

It was 114°F (46°C) in the shade. The distance to the nearest spring was 25 miles (40 kilometers).

When Matt Riley and Henry Kitto set off on foot at 9 a.m. from the OK Mine to Cottonwood Springs, they had one canteen between them. Their plan was to refill the canteen at Cottonwood Springs, then continue on to Mecca to celebrate the 4th of July. Neither man knew much about the route or spring locations.

Kitto became ill twelve miles (nineteen kilometers) out. He gave the canteen to Riley and turned back. He survived the walk back to the mine.

Riley pressed on, trying to get to Cottonwood before he ran out of water. He never made it. His body was later found under a bush next to the road to Mecca.

The tracks Riley left behind indicated he had passed within 200 yards (180 meters) of Cottonwood Springs before

turning back and circling aimlessly in the desert, a sign of disorientation which is a common side effect of extreme dehydration.

Matt Riley's fatal mistake was to walk across the desert without enough water. To hike all day in the mid-summer desert sun, a person needs to drink at least two gallons (7.6 liters) of water. Riley and Kitto had set off with only one small canteen. There was no way they could have survived a 25-mile (40-kilometer) trek in 114°F (46°C) heat with that little water.

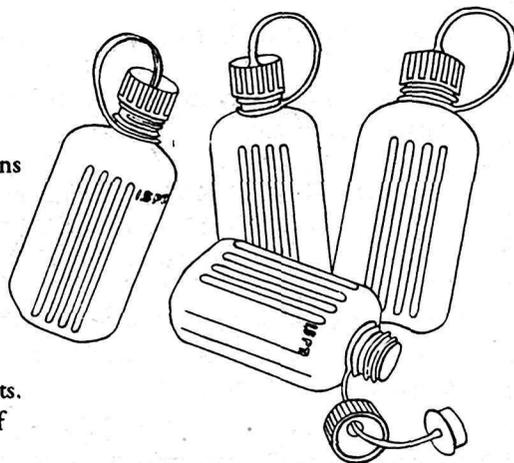
Kitto was smart enough to turn back, a decision that saved his life. When Riley decided to continue on, he doomed himself.

Matt Riley died 87 years ago, but his mistake continues to be repeated by desert visitors every year. To have a safe visit at Joshua Tree National Monument, please abide by the Desert Safety Check List.

The Desert Is Full of Surprises and Some Surprises Can Be Dangerous. Always Be Prepared.

Desert Safety List

1. **Always** be sure that someone knows where you are going and when you expect to return. This is especially important if you travel or hike alone. However, hiking or traveling alone is NOT recommended.
2. **Always** carry plenty of water, at least 1 gallon (3.8 liters) per person per day; 2 gallons (7.6 liters) when it is hot or you are performing strenuous activity. Drink the water and do not economize. When the water is half gone, it is time to turn back.
3. Wear sturdy shoes, sunglasses, and a wide-brimmed hat. Apply sun screen. Wear layered clothing. Remember that the desert temperatures can reach over 90°F (32°C) and drop below 50°F (10°C) in one day, depending on the weather and where you are going.
4. Know how to use a topographic map and a compass if you hike cross-country or on trails that are not well defined. It is easy to become disoriented in the desert where many landmarks and rock formations look similar. Know your physical limitations in the heat and rugged desert terrain.
5. **Do Not Enter** mine shafts or associated buildings. They are extremely hazardous.
6. Keep your vehicle well-maintained. Carry extra water and non-protein food, shovel, tools, flares, and blankets. Check road conditions and beware of flash floods.
7. If you are stranded or lost in the desert, stay with your vehicle. It is much easier to spot a vehicle than a wandering person. If you must leave your vehicle, travel when it is cool. Carry all the water available and eat little or no food. Save your sweat by wearing clothing. Mark your routes with stones, notes, or whatever you can find. **THINK AND DON'T PANIC.** If you have followed the above steps, the park will begin a search immediately when you are reported missing.
8. Watch where you put your hands and feet especially during hot summer months. Snakes are active during this time of year.
9. **Again, hiking or traveling alone is not recommended.**



Mountain Biking At Joshua Tree

Mountain bikes are welcome in Joshua Tree National Monument. For your own safety and for the protection of the natural features of the monument please keep the following in mind:

- Bikes, like all vehicles, must stay on established roads. Tire tracks on the open desert can last for years and will spoil the wilderness experience of future hikers.
- Paved roads in the monument are narrow without paved shoulders. Curves, boulder piles, and Joshua trees often restrict the vision of bikers and motorists.
- Helmets are *highly* recommended.

The unpaved roads in the monument are safer for bikes and offer many opportunities to explore the area. The following dirt roads are open to mountain bikes:

Pinkham Canyon Road. This challenging 20-mile (32.4-km) road begins at Cottonwood Visitor Center, travels along Smoke Tree Wash, then cuts down Pinkham Canyon. Sections of the road run through soft sand and rocky flood plains. The road ends at a service road next to Interstate 10.

Black Eagle Mine Road. Beginning 6.5 miles (10.5 km) north of Cottonwood Visitor Center, this dead-end dirt road runs along the edge of Pinto Basin, crosses several dry washes, then winds up through canyons in the Eagle Mountains. The first 6 miles (9.7 km) of the road are within the monument boundary. Beyond that point is Bureau of Land Management land and a number of side roads. Several old mines are located near these roads but may be dangerous to approach.

Old Dale Road. This 23-mile (37.3-km) road starts at the same point as the Black

Eagle Road. For the first 11 miles (17.8 km), the road runs across Pinto Basin, a flat, sandy dry lake bed. Shortly after leaving the basin, the road climbs up a steep hill, then crosses the monument boundary. Near that point a number of side roads veer off toward old mines and private residences. If you stay on the main road you will come out on Highway 62, 15 miles (24.3 km) east of Twentynine Palms.

Queen Valley Roads. A network of roads, totaling 13.4 miles (21.7 km), crisscross this valley of boulder piles and Joshua trees. A bike trip can begin at Hidden Valley campground or at the dirt road opposite the Geology Tour road. Several bike racks have been placed in this area so that visitors can lock their bikes and go hiking.

Geology Tour Road. The road turns south from the paved road 2 miles (3.2 km) west of Jumbo Rocks. The distance from the junction to Squaw Tank is 5.4 miles (8.8 km). This section is mostly downhill but bumpy and sandy. Starting at Squaw Tank a 6-mile (9.7-km) circular route can be taken that explores Pleasant Valley. A guide to the road is available at the beginning of the road.

Covington Flats. The dirt roads in Covington Flats offer access to some of the monument's largest Joshua trees, as well as to junipers, pinon pines, and some of the lushest vegetation in the high desert. A nice ride is from the Covington Flats picnic area to Eureka Peak, 3.8 miles (6.2 km) one way. The dirt road is steep near the end, but the top offers views of Palm Springs, the surrounding mountains, and the Morongo Basin. Your trip will be 6.5 miles (10.5 km) longer round-trip if you ride over to the backcountry board, where some excellent hiking is available.

An Interesting Fact...

Did you know that if we recycled all of our Sunday newspapers, we could save over 500,000 trees each week or 26,000,000 every year? Recycling plays a key role in protecting our environment, conserving natural resources, and reducing the amount of trash going to landfills which are rapidly filling up.

Joshua Tree Journal

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