Joshua Tree Journal

Fall-Winter 1991 **Activities Information Regulations** **Free**

Welcome to Joshua Tree National Monument, a desert area of unusual beauty and diversity. This area was set aside as a national monument 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. August 25, 1991, was the 75th birthday of the National Park Service, and we celebrated this event as one of 358 areas in the National Park System.

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. We ask you to treat the monument as if it were your own. This national treasure is yours, and it belongs to all of us. Please look for scheduled programs, hikes, and special events listed in this newsletter and posted bulletin boards throughout the park. I think you will appreciate your visit more by a better understanding of your surroundings.

Whatever your reason for coming to Joshua Tree National Monument, we hope you are rewarded by what you see, hear, touch, or smell. We wish you a safe and enjoyable visit.

Dave Moore, Superintendent

In This Issue

- Area Map 5
- Backcountry Information 5
- Campgrounds 3
- Desert Safety Check List 8
- Emergency Numbers 2
- Hiking 3
- Maps—Nature Trails 4
- Mountain Biking 8
- Nature Trails 4
- Park Regulations 2
- Rock Climbing 6
- What to See & Do 2

For Our International Visitors

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

75 Years of Preservation

National Park Service Celebrates Diamond Anniversary

The magnificent Yellowstone country would not have been available for our enjoyment today if not for the generosity of the American spirit. In 1870, the Washburn-Langford expedition explored the Yellowstone area and documented the wonders of bubbling paint pots and columns of boiling water spouting hundreds of feet. Instead of claiming the land for themselves, they proposed to turn it into a preserve for all to enjoy. That night around a blazing campfire, the national park idea was born. And Yellowstone became the world's first national park two years later.

In the 1890s, Yosemite, Sequoia, and Mount Rainer, were added to the national park system. The areas were administered in a patchwork pattern by several agencies. Army engineers and cavalry units developed and protected most of them. Communications were difficult between the various departments involved in park operations.

In 1914, a Chicago businessman, Stephen Mather, wrote a letter to Secretary Franklin Lane of the Department of Interior, criticizing the management and conditions of the national parks. Lane replied, "If you don't like the way national parks are run, why don't you come down to Washington and run them yourself?"

Mather took on the challenge. With his assistant, Horace Albright, they made order out of chaos and worked hard with various elected officials to establish a central agency to manage the national parks.

Finally, Congress passed the Organic Act. President Woodrow Wilson signed the bill on August 25, 1916, bringing the existing national parks and monuments under the coordination and administration of the National Park Service

> "to conserve 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."

What nobler goal can there be? No wonder James Bryce, former British ambassador to the United States, called the national park system "the best idea America ever had." Since 1916 the system has grown extensively to 358 areas, with each unit assigned its own unique mission.

Initially, the National Park Service mainly managed natural areas west of the Mississippi. In 1933 the first

major expansion occurred. To form a single park system truly national in scope, President Franklin D. Roosevelt transferred to the Park Service military parks and battlefields, monuments, and memorials in the eastern half of the country.

The system was further enlarged by areas intended to serve mass recreation and simultaneously preserve natural or cultural features such as the Blue Ridge Parkway, national seashores and lakeshores, and areas serving large urban populations such as Golden Gate National Recreation Area.

The second major expansion came in 1980, more than doubling the system's size, when Congress added 47 million acres of largely remote and unspoiled land in Alaska.

Another type of expansion affecting the Park Service is the growing number of visitors to the parks. The visitation has increased dramatically from fewer than a half million visitors in 1916 to close to 300 million by the end of the 1980s.

Still chronically understaffed and under funded, the Park Service has been struggling to keep up with the service and maintenance demands such use creates. As a result, the public feels the pressure from crowded conditions in the parks. People hiking heavily-used backcountry trails or being turned away from overbooked campgrounds aren't receiving the quality experience they deserve.

Many parks, such as Yellowstone, Yosemite, and Grand Canyon, are threatened by problems of wildlife poaching, road deterioration, encroaching development, air pollution, and acid rain. Yet, our national parks may be the only habitat left for plants and animals unique solely to North America.

The system is also in dire need of public effort to solve the problems of trash, crime, and commercialism threatening the parks. The agency does not have enough money to maintain all of its parks properly, and it is under constant pressure to add new ones when local officials say they cannot afford to preserve public land.

As our world's open, natural areas succumb to urban development, and biological diversity declines further and further, we rely on the parks to provide us with an escape from the frantic pace of modern life. To this end, our generation has a responsibility to build up the national park legacy and leave the parks "unimpaired for future generations."

??? Now That I'm Here, What Do I 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 Cottonwood Visitor Center is open daily 8 a.m. to 4 p.m. except for Christmas and occasional closures due to staff shortage. The Black Rock Canyon Visitor Center is open most days October through May. 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 April, 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.

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. If you are involved in this sport, please take time to read the article on climbing concerns on page 6.

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 over-population 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.

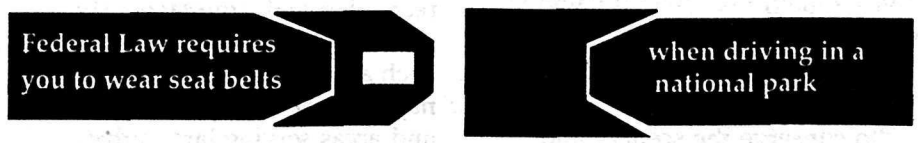
Collecting any vegetation, living or dead, is prohibited. Fires are limited to campground and picnic area fireplaces.
Gathering native vegetation or building fires outside designated fireplaces creates fire hazards and radically alters the appearance and life cycle of the desert. Desert vegetation grows 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.

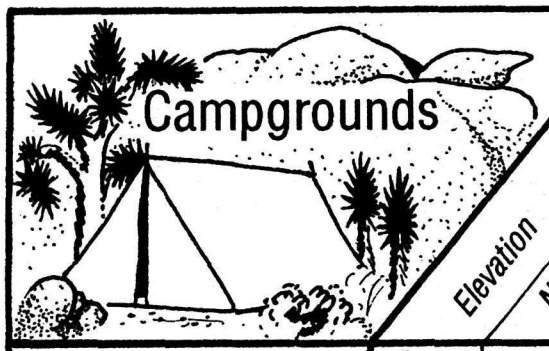
Dispose of all your trash properly.
The dry desert climate cannot quickly decompose paper, aluminum, glass, and other litter.

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.





	Elevation	Number of Sites * Individual/Family	Number of Sites * Group (Reservation required)	Fee/night * Per group site=/g Per individual/family site=/i	Water	Chemical Toilets	Flush Toilets	Tables	Fireplaces	Dump Station	Horses Permitted	Remarks
Belle	3,800' 1158 m	17				•		•	•			
Black Rock Canyon	4,000' 1219 m	100		$10/i	•		•	•	•	•	•	Campsite No.62 is wheelchair accessible
Cottonwood	3,000' 914 m	62	3	$6/i $12/g	•		•	•	•	•		Group site No.2 is wheelchair accessible
Hidden Valley	4,200' 1280 m	39				•		•	•			
Indian Cove	3,200' 975 m	107	13	$12/g		•		•	•			
Jumbo Rocks	4,400' 1341 m	130				•		•	•			Campsite No.46 is wheelchair accessible
Ryan	4,300' 1310 m	29				•		•	•		•	
Sheep Pass	4,500' 1371 m		6	See remarks		•		•	•			$13 per group for up to 14 nights
White Tank	3,800' 1158 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 range from ten to seventy people.
- Quiet hours are from 10 p.m. to 6 a.m. Generator quiet hours are from 7 p.m. to 7 a.m.
- Reservations may be obtained for individual/family sites at Black Rock Canyon and all group sites by calling *(619)365-9585, 7:30 a.m.–4:00 p.m., Wednesday through Sunday. 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 October through May and a 30-day limit from June through September.
- Black Rock Canyon, Belle, and Ryan campgrounds and all group campgrounds are usually closed during the summer when the park is less crowded.
- When in doubt, ask a ranger.

*** Phone number and camping fees scheduled to change mid-December.**

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

SOME HIKING TRAILS IN JOSHUA TREE NATIONAL MONUMENT

FOR INFORMATION ON OTHER HIKES IN THE PARK PLEASE REFER TO PUBLICATIONS AVAILABLE AT PARK SALES AREAS

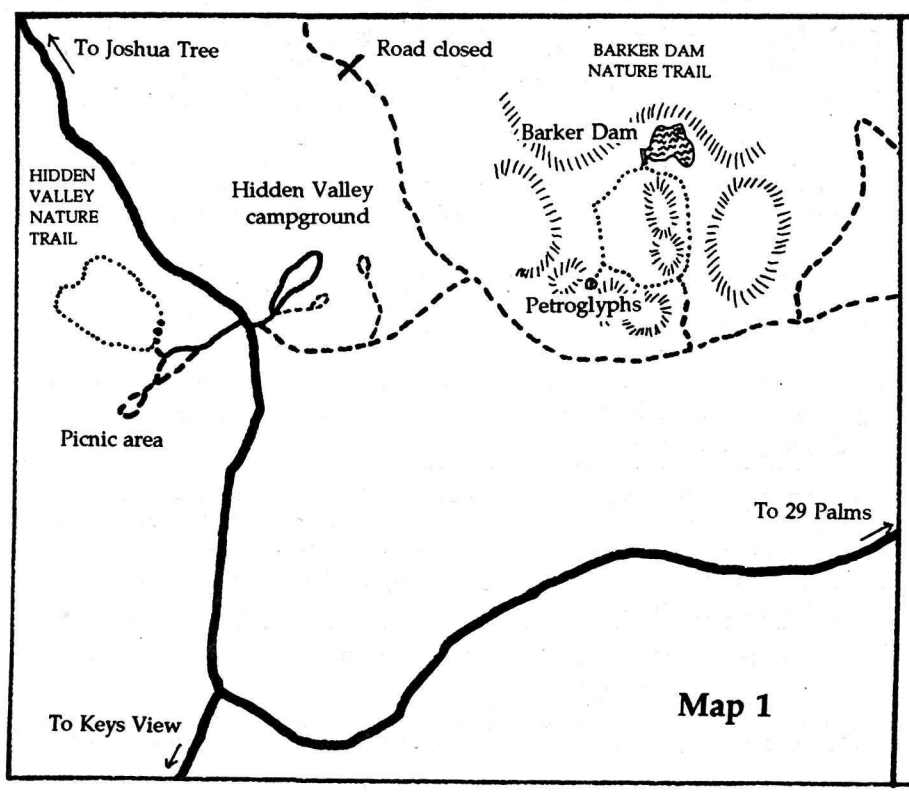
Trail	Round-trip mileage	Time	Starting Point	Trail description/rating
Boy Scout	15.6 miles (25.1 km)	1-2 days	Indian Cove backcountry board or Keys West backcountry board 0.5 mile (0.8 km) east of Quail Springs picnic area.	Scenic trail through the westernmost edge of the Wonderland of Rocks. See backcountry 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, 5,278 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, 5,461 feet (1,638 meters). **Strenuous.**

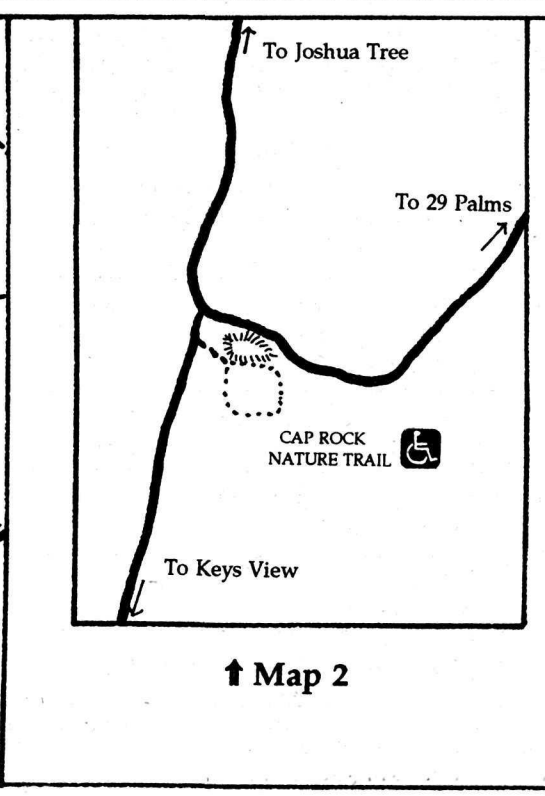
Thirty-five miles of the California Riding and Hiking Trail pass through the monument. Access to the trail is available at its junction with Covington Flats, Keys View, and Squaw Tank (Geology Tour) roads; at Ryan Campground; and at two other junctions, near Skull Rock and north entrance. This allows 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.

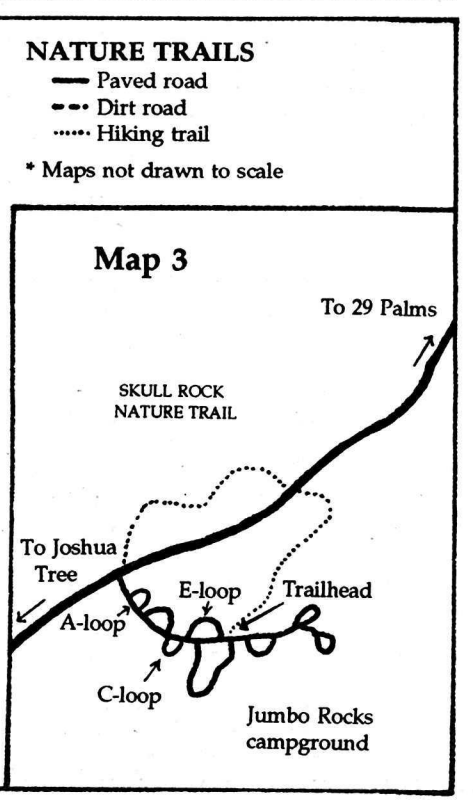
NATURE TRAILS

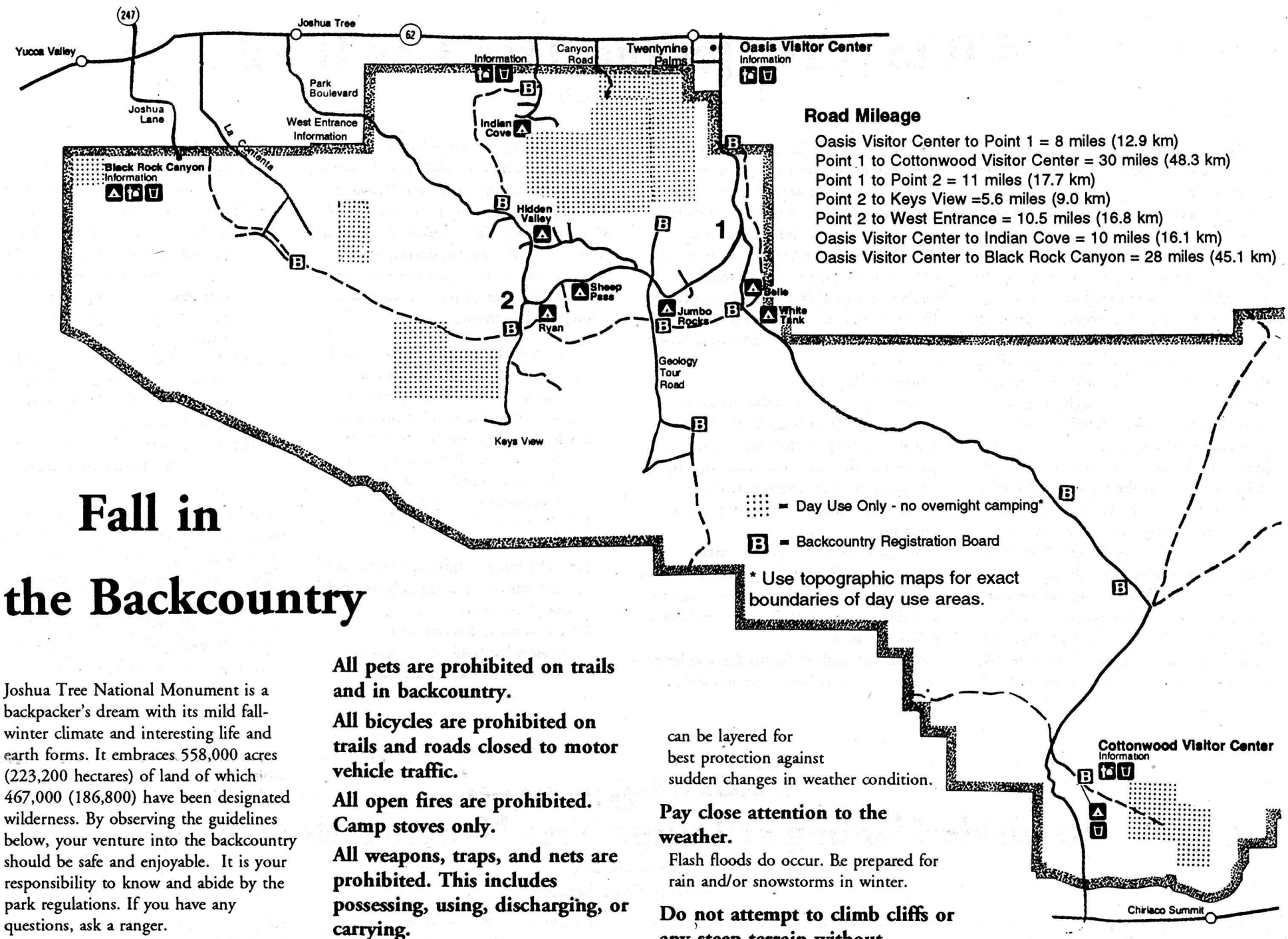
Short walks, most with informational signing
Watch for sign shown at left

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 trail brings you to Barker Dam, built to collect water for the cattle of early ranchers. The loop trail takes you past Indian 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, north-south, 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 1800s.
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 5,195 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 Indians, 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.









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)

Fall 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 degrees F (4.4 degrees C) in a 24-hour period are common in the desert. Wear a hat, sunglasses, and sturdy boots. Use sunblocking lotion liberally. 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.

5.0 to 5.14, Joshua Tree Has It All

Deborah Brenchley
Park Ranger

By stretching to his full extension, he could just reach the small flake. Calloused fingers were set gingerly on the minuscule edge. He delicately transferred his weight from his feet to his hand and moved his feet up, smearing the rubber of his shoes against the rock to maintain balance as he reached for the next handhold. Tired fingers and pumped-up forearms desperately struggled to maintain the hold. Whoosh! He slipped off his stance, falling through the air until he felt a tug on his harness as the rope went tight, and he stopped. His ears were filled with the pounding of his heart as he rested a few feet below his last piece of protection. He sighed and started the sequence of moves that lead back up the same route.

To many people Joshua Tree National Monument means climbing. There are a multitude of climbs here, about 3,500 known routes. Climbers from all over the world flock to the monument, especially during the fall and spring. Sunshine and clear skies draw them here from areas like Yosemite, the Rocky Mountains, and Idyllwild, where colder, more unpredictable weather prevails during the winter. On any day of the week you can find climbers out on the rocks testing their skills. During busy weekends climbers seem to outnumber lizards on the rocks.

Many non-climbers like to watch climbers performing the climbing ritual. The best climbers appear to perform dance-like moves as they overcome gravity to ascend.

How do they do it?

Climbing was once explained to me in simple terms: "Reach up to the highest available handhold, then move your feet up. Repeat this until you reach the top." Of course, it never seems that easy or straight forward when you are the one climbing.

One of the other frequently asked questions is, "Why do they climb?" For an answer you'll have to track down and ask a climber, since everyone seems to have a different reason.

If you talk with a climber for any length of time, you may hear some numbers thrown in to describe climbs. Most climbs are rated according to difficulty. At Joshua Tree the climbs are under the Yosemite Decimal System, rating from 5.0 to 5.14. *Mountaineering: The Freedom Of The Hills*, published by the Mountaineers, has a tongue-in-cheek description of the ratings, so that a beginner or non-climber can have a better understanding.

5.0 to 5.4 There are two hand- and two footholds for every move; the holds become progressively smaller as the number increases.

5.5 to 5.6 The two hand- and two footholds are there, obvious to the experienced, but not necessarily so to the beginner.

5.7 The move is missing one hand- or foothold.

5.8 The move is missing two holds of the four, or missing only one but is very strenuous.

5.9 This move has only one reasonable hold which may be for either a foot or a hand.

5.10 No hand- or footholds. The choices are to pretend a hold is there, pray a lot, or go home.

5.11 After thorough inspection you conclude this move is obviously impossible; however, occasionally someone actually accomplishes it. Since there is nothing for a handhold, grab it with both hands.

5.12 The surface is as smooth as glass and vertical. No one has really ever made this move, although a very few claim they have.

5.13 This is identical to 5.12 except it is located under overhanging rock.

Since this was written, 5.14 has been added to the scale. Good luck at figuring out how they climb something that hard!

For more information about climbing, ask for a climbing brochure at any of the monument entrances or visitor centers.

Enough reading about climbing. It is time to get out and enjoy it, either as a participant or a spectator.

Planting Pipes?

Roadside Planting at Joshua Tree National Monument

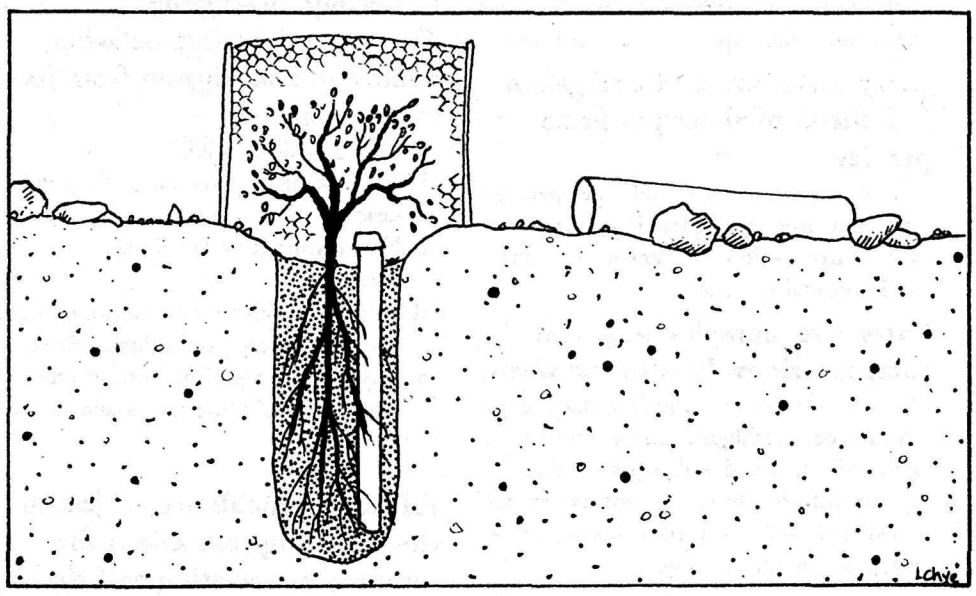
Mark Holden
Nursery Work Leader

"Hey - wait a second. What was that in the ground? Look, there's more. Slow down. Is that PVC pipe underneath those plants? Why did they plant that there?" Even those not adept at windshield botany, the ability to identify plants from within a moving car, cannot miss the PVC pipes beside a number of plants along Joshua Tree National Monument's roadsides. What is the purpose of these pipes?

All paved roads in the monument are scheduled for realignment and resurfacing. Some sections have already been finished. Following construction, there are often sections of the roadside which are devoid of vegetation due to construction and road realignment.

The monument needs to replant these disturbed areas. The Park Service has a mandate to protect its resources, and only native desert vegetation can be used. To prevent introduction of exotic influences, seed for these plants must be collected from within the monument, often from very localized areas. When the resource management division discovered few commercial nurseries grow native desert plants, the monument started its own small nursery facility.

Desert plants are specially adapted to survive in the desert, and the nursery has developed techniques which consider these adaptations. Many desert plant species have a long tap root to reach deep ground water. One of the nursery's technical developments is the "tall pot," a 30-inch tall container of 6-inch diameter PVC pipe. Although large and bulky, this pot shape allows for the vertical development of desert plant's tap root, critical for survival.



These pots are not easy to plant. A deep hole which fits the potted plant must first be bored in the ground with an auger. A wire mesh at the bottom of each pot holds in the root mass. This is removed, and the entire potted plant is placed in the hole. The pot is then slipped up and off the plant, and the hole is filled and watered. The plant is then caged to prevent animal damage through browsing. A crew of five can plant approximately thirty plants a day.

Okay, so why the PVC pipes beside each plant? Supplemental irrigation is delivered to these plants when precipitation is lower than normal. To aid in watering, a PVC pipe the same height as the tall pot is planted beside the plant. In the desert surface irrigation loses much water to evaporation; this system delivers water directly to the plant's root system. These pipes will be removed after two or three years, once the plant becomes well established. The pipes are also capped to avoid drying the root system and to keep small animals from falling in.

When you see a PVC pipe in the ground, the plant next to it was grown in the monument's nursery. Following disturbance, the desert is slow to heal by itself. Through planting, we begin the process of visual and natural recovery. The nursery plants on a site provide a seed source for new plants and a favorable environment, including shade and predator protection, for the natural reestablishment of other plants. Also, plants serve as a barrier to deter damage caused by on-going vehicle traffic.

The planting crew works from January to March. You may see them along the roadside with a large water tank and plants in pots lined along the road. For their safety and yours, please reduce your speed when passing. On finished sites, please do not drive or park on them, or disturb the PVC pipes or caps. It is the desert at work, with a little help from us.

**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.

What in the Heavens Is Going On?

**Roger A. Howell
Park Volunteer**

This fall there will be many celestial delights for you to gaze at while visiting Joshua Tree National Monument. The heavenly phenomena of planets in conjunction, meteor showers, the Milky Way galaxy, the Andromeda galaxy, and even a lunar eclipse will keep your head tilted upward as you sit warm and cozy around the campfire.

First is the appearance on the morning of October 17 of two of the brightest planets -- Jupiter and Venus. Before sunrise on the 17th, look above the eastern horizon and you'll see them both very bright and close together. When two planets appear side-by-side, astronomers call the event a "conjunction."

Meteors, better known as "shooting stars," are dusty particles from comets like the Halley's comet that burn up in our atmosphere. A comet is a giant, dirty snowball. When a comet nears the sun, it melts, leaving a trail of debris known as the comet's tail. Meteors are some of this cometary debris entering the Earth's atmosphere. This fall at Joshua Tree National Monument, you may see three meteor showers. They are named after the constellations from which they come. For example, the Leonids, appearing on the night of November 18, come from the constellation Leo and the Geminids, on December 14, from the constellation Gemini. A third meteor shower from the constellation Bootes will appear in the sky on January 4, 1992. Attend a "Star Talk" at Joshua Tree National Monument this fall and learn how to find Leo, Gemini, and Bootes in the night sky through a telescope.

The beautiful, ringed planet of Saturn will be visible in October and November above the southwestern horizon just after sunset. Saturn will be near the constellations Sagittarius and Capricornus. Don't miss it. The rings are spectacular!

An added bonus! There will be a lunar eclipse this season at the monument. In the predawn hours of December 21 the Moon will glide through the Earth's shadow.

We live in the Milky Way galaxy, which is shaped like a spiraling "4th of July" fireworks pinwheel. This fall at the monument, the arm of our Milky Way galaxy will be highly visible in the evening skies. You will be looking at the Milky Way when you find the constellation Cygnus, the Swan. Better yet, if you can locate the constellation Sagittarius, you will be looking toward the center of our galaxy! Expect to see many stars in this part of the sky. Our sister galaxy, the great Andromeda galaxy, will be visible this fall as well.

If you would like to learn more about the night skies over Joshua Tree National Monument, plan on attending one of our "Star Talks" this fall. The talks are at the **amphitheater of Cottonwood Springs campground at 7:00 p.m., October 26 and November 9.** The lectures include a colorful astronomy slide show, a free star chart, and a chance to gaze through a telescope at the wonders of the cosmos. As you gaze up at the heavens, be thankful you have as beautiful a place as Joshua Tree National Monument within just a few hours of Los Angeles, in which you can escape to the "dark skies" to behold the wonders of the universe. Let us all help to preserve Joshua Tree National Monument so it may delight our children as it has brought joy into our lives for so many years.

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:

**JOSHUA TREE NATURAL HISTORY ASSOCIATION
74485 National Monument Drive
Twentynine Palms, CA 92277-3597**

Name_____

Address_____

City _____

State _____ Zip _____

BOOKS FOR SALE

All profits go to the support of interpretive programs
at Joshua Tree National Monument

	Price
☐ Joshua Tree National Monument, A Visitor's Guide	$5.50
☐ Trails Illustrated Topo Map	$6.95
☐ Joshua Tree: Desert Reflections	$3.00
☐ Hikes & Walks, 25 Trails in Joshua Tree National Monument	$3.25
☐ Desert Survival Handbook	$4.50

Association members receive a 10% discount

Check the books you wish to order and mail with a check or money order to:

**JOSHUA TREE NATURAL HISTORY ASSOCIATION
74485 National Monument Drive
Twentynine Palms, CA 92277-3597**

Make checks or money orders payable to *Joshua Tree Natural History Association.* Include 7.75% sales tax and $3.00 for shipping and handling.

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.

"Teach your children what we have taught our children - that the earth is our mother. Whatever befalls the earth, befalls the sons of the earth."

Chief Seattle

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...

Consumer Reports reported that car owners who do their own oil changes generate as much as 400 million gallons of waste oil annually. That is equavilent to 36 *Exxon Valdez* spills per year! Yet only about 12% of that oil is disposed of properly at a service station or through recycling. The rest ends up in the ground, streams, or sewers. Just one gallon of oil can make a million gallons of water undrinkable.

Joshua Tree Journal

Produced with love and cooperation by the employees and volunteers of Joshua Tree National Monument and Joshua Tree Natural History Association.

Published by Joshua Tree Natural History Association.

Printed by Hi-Desert Publishing Company on recycled paper.