

# Joshua Tree Guide



Ample fall and winter rains can create impressive spring flower displays. Here, woolly marigolds carpet the Joshua tree forest near Keys View.

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JOSHUA TREE NATIONAL PARK  
74485 NATIONAL PARK DRIVE  
TWENTYNINE PALMS, CA 92277

## — Important information

### **accessibility**

The nature trails at Cap Rock and the Oasis of Mara are accessible. An assistive listening system is available for use during ranger programs with prior notice. Call (760) 367-5500 for additional information.

### **all terrain vehicles**

ATVs may not be used in the park.

### **bicycling**

Bicycling is permitted on public roads, both paved and dirt. There are no bicycle paths along roads. Bikes are prohibited on backcountry and nature trails.

### **bus tours**

Several companies offer tours of the park by bus or van. Contact a travel agent for additional information.

### **campfires**

Campfires are permitted in campgrounds and in picnic areas where fire grates are provided. Campfires are not allowed in the backcountry. Collecting vegetation, living or dead, is prohibited so bring your own firewood.

### **climate**

Days are typically clear with less than 25% humidity. Temperatures are most comfortable in the spring and fall, with an average high/low of 85° and 50°F respectively. Winter brings cooler days, around 60°F, and freezing nights. It occasionally snows at higher elevations. Summers are hot, over—sometimes well over—100°F during the day and not cooling much below 75°F until the early hours of the morning.

### **climbing**

Motorized drilling is prohibited within park boundaries, and bolting is not allowed in designated wilderness. All fixed protection found in place should be considered potentially unsafe. For more information about climbing in Joshua Tree pick up a climbing brochure at an entrance station or visitor center.

### **commercial filming**

When filming or photography involves advertising a product or service, the use of models, sets, props, or the use of a restricted site, a film permit is required.

### **day-use and restricted areas**

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

### **dehydration**

It is easy to become dehydrated in arid desert environments. Even if you only plan to drive through the park, you should have some water with you. If you are going to

camp, we recommend one gallon of water per person per day. If you are going to be hiking or biking, you will want to take along two gallons per person. Drink the water and do not economize. When the water is half gone, it is time to turn back.

### **emergency phones**

In an emergency call San Bernardino Dispatch at 909-383-5651. Call collect. Pay phones are located at the Oasis of Mara in Twentynine Palms and at Black Rock Campground. 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).

### **environment**

Two deserts, two large ecosystems whose characteristics are determined primarily by elevation, come together at Joshua Tree National Park. Below 3,000 feet, the Colorado Desert encompasses the eastern part of the park and features natural gardens of creosote bush, ocotillo, and cholla cactus. The higher, moister, and slightly cooler Mojave Desert is the special habitat of the Joshua tree. Joshua tree forests occur in the western half of the park. The western part of the park also includes some of the most interesting geologic displays found in California's deserts. In addition, five fan palm oases dot the park, indicating those few areas where water occurs naturally and where wildlife abounds.

### **entrance fees**

General admission to the park is \$10.00 per vehicle and is good for seven consecutive days. A Joshua Tree Pass may be purchased for \$25 and a Golden Eagle Pass, which is good for all NPS sites, costs \$50. Both are good for 12 months. A Golden Age Pass may be purchased by any U.S. citizen 62 or older for \$10 and it is good for life.

### **firearms and weapons**

Firearms, including fireworks, traps, bows, BB guns, paint-ball guns, and slingshots, are not allowed in Joshua Tree.

### **food, lodging, services**

There are no concessions within the park. However, the communities that surround the park can fulfill most visitor needs. Contact local chambers of commerce for additional information (listed on page 3).

### **getting to the park**

The park is located about 140 miles east of Los Angeles via I-10. The west and north entrances to the park are off CA Hwy 62 (Twentynine Palms Highway), at the towns of Joshua Tree and Twentynine Palms. The south entrance is at Cottonwood Spring, about 25 miles east of Indio off I-10.

### **horses**

Horseback riding is a popular way to experience the park but, because of the

special requirements for horses and other stock in desert environments, you will want to request the site bulletin on horse use within the park before you come.

### **international visitors**

Information is available at visitor centers and entrance stations in Dutch, French, German, Italian, Japanese, and Spanish.

### **keep the wildlife wild**

Feeding coyotes, 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.

### **leave no trace**

During your visit, pick up trash around campgrounds and trails. Your actions will inspire other park visitors.

### **lost & found**

Report lost and found items to any visitor center or ranger station. A report will be filed and the article returned if found.

### **motorcycles**

Motorcycle operators must carry a valid state driver's license and vehicles must display valid state license plates. No off-road or trail travel is allowed.

### **off-road driving**

Vehicles, including bicycles, are prohibited off established roads. The desert ecosystem is fragile. Off-road driving and riding creates ruts, upsetting 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.

### **parking**

Park roads, even the paved, main roads through the park, are narrow, winding, and have soft sand shoulders. Accidents occur when visitors stop in the middle of a lane to take a picture or park alongside the road and get out to take a closer look. Park in designated pullouts and parking lots.

### **pets**

While pets are allowed in the park, their activities are quite restricted. They must be on a leash at all times, they must never be left unattended—not even in a vehicle, and they are prohibited on trails.

### **potable water**

Water is available at the Oasis of Mara in Twentynine Palms, at Black Rock and Cottonwood Campgrounds, at West Entrance, and at Indian Cove Ranger Station. Water sources within the park are not potable and are reserved for wildlife.

### **stay out and stay alive**

Mining was an important activity in this area and numerous mining sites can be

found within the park. If you choose to visit them, use extreme caution in the vicinity of old mine workings. Mine shafts are unstable and are often filled with harmful gases.

### **take only pictures**

Over 1.25 million people visit Joshua Tree National Park each year. If each visitor took only one rock or one branch from a bush, the park, our national heritage, would soon be gone. Removal, disturbance, destruction, or disfigurement of anything in the park is unlawful.

### **trash**

Our dry desert climate cannot quickly decompose such things as orange peels, apple cores, egg shells, and other picnic remains. Loose paper blows into bushes and creates an unsightly mess and plastic six-pack rings strangle birds. Dispose of your trash in a responsible manner and recycle whatever you can.

### **vehicle laws**

Park roads are narrow and winding. Some areas are congested. Speed limits are there for your safety and well-being. State and federal vehicle laws apply within the park.

### **visitor activities**

Ranger-led programs are offered on the weekends from mid-October through mid-December and from mid-February through May. Check at visitor centers, at entrance stations, and on campground bulletin boards for the current schedule.

### **visitor centers**

The park's main visitor center is located at the Oasis of Mara in Twentynine Palms. It is open 8 a.m. to 5 p.m. during spring. The Cottonwood Visitor Center is open from 8 a.m. to 4 p.m. A variety of books, videos, maps, and other park-related items are available as well as cultural and natural history exhibits.

### **wildflowers**

Spring blooming periods vary with the elevation, the temperature, and the amount of moisture in the soil. You can get up-to-date information by calling one of the wildflower hot lines: Anza-Borrego (760) 767-4684; Living Desert (760) 346-5694; or The Payne Foundation (818) 768-3533.

### **world wide web**

If you are "connected," check out the National Park Service publications on the web (<http://www.nps.gov>). We are adding more information all the time.

### **you are responsible**

You are responsible for knowing and obeying park rules. Check at entrance stations, at visitor centers, and on campground bulletin boards to find out what they are. When in doubt, ask a ranger.

## A Most Unusual Wildflower Season

Hurricane Nora—after being downgraded to a tropical storm—came ashore on September 25, 1997 and dropped two and a half inches of rain on Joshua Tree National Park. This storm and at least two others nearly doubled our annual rainfall, triggering the germination of millions of wildflower seeds. Two months of relatively mild weather followed, which gave many desert wildflowers time to germinate, flower, and spread their seeds for the next generation.

A great display of the fringed, purple wands of amaranthus and the low growing mats of yellow chinch weed occurred in the Pinto Basin in October and November. These summer annuals remained dormant until after the fall rains. Other fall to early-winter bloomers were wishbone and windmills.

Summer annuals are capable of blooming despite hot temperatures because they conserve moisture by not opening their stomata to exhaust oxygen during the heat of the day. Instead they complete photosynthesis at night, losing much less moisture. Broad leaf rosettes, which are common in spring annuals, are lacking in summer annuals because they would collect too much heat on hot days. But during this most unusual fall and winter, while summer annuals were blooming, many spring wildflowers began germinating and spreading their basal leaf rosettes onto the desert floor.

By December leaf rosettes of woody bottlewashers, brown-eyed primroses, the small flowered poppy, and fiddlenecks were scattered along the roadside in the Indian Cove area, and leaves of the desert lily and sand verbena were out in the Pinto Basin. Typically, following germination, leaf rosettes hug the desert floor until warmer temperatures allow them to successfully send up flower stalks, about the middle of February or sometimes not until mid-March. In the Pinto Basin this year (1,200 to 2,000 feet), sand verbena began blooming in November right alongside summer annuals! In the Indian Cove area (3,200 feet), desert coreopsis, desert dandelion, woody bottlewasher, brown-eyed primrose, and notch-leaved phacelia were blooming in early January. Many of these same plants plus white pincushions and yellow sun cups were blooming in the Pinto Basin at the same time. Up in Juniper Flats and Lost Horse Valley at 4,500 feet, scattered dandelions, pincushions, and purple mat were also found blooming.

Although scattered and sparse, the number of spring annuals in bloom this January was indeed unusual. A close look at some of these wildflowers revealed intriguing adaptations. The coreopsis flower stalks were coming up, but they started the day bent over, with their flower heads almost touching the sun warmed ground. As the day warmed, they straightened up and twisted to face the sun. Nodding heads of woody bottlewasher were budding while lying on top of their leaf mats. They stayed this way for several days until the stalk appeared to be almost full length. Growing out of a cheesebush in the Live Oak area, the showy red flowers of desert paintbrush were using a host plant for protection. The leaves of lacy-leaved phacelia looked like thick carpeting under a creosote bush. The dark green leaves were collecting heat and being sheltered by the shrub, as well as holding their warmth because of the thickness of their many layers.

In addition to wildflowers, the wet weather and warm temperatures also triggered the blooming of a considerable number of desert shrubs. The yellow flowered brittle bush and bladderpod displayed along roads and scattered desert mallow created splashes of orange. Desert lavender bloomed in the Pinto Basin as Joshua trees began to bud in the upper areas of the park.

So, what does that mean for the spring flowering season? In many areas leaf rosettes will continue to thrive, hugging the ground for warmth while waiting for warmer temperatures. Often, even under a blanket of snow, leaves will survive. As of the middle of January, the leaves of numerous plants were still evident and appeared to be quite healthy. Although some desert lily leaves had dried tips and looked questionable, others seemed quite healthy.

Another inch of rain fell in January and additional spring rains would affect the length and intensity of this wildflower season. However, another factor in the blooming cycle is warming spring temperatures. If the weather turns mild in February, wildflowers could continue to send up their flower stalks and a thick carpet might arrive early this year. Should cooler weather patterns return, look for continued scattered individuals, with the first major flower displays not occurring until the first week in March.

The Cottonwood area, Pinto Basin, and the south boundary are usually the site of the first spring wildflowers. As

*Welcome* to Joshua Tree National Park, an increasingly popular destination for people from throughout the United States and the world. Some come seeking solitude, others recreation; some come to learn about the natural and cultural wonders of this desert region, still others to be reassured that there are still areas offering a glimpse of the natural world as it once existed.

During your visit, I encourage you to get out of your vehicle and take the opportunity to look, listen, smell, and explore. Rangers are available to assist you with questions about the many activities and attractions of this desert environment. An excellent way to start your visit is to stop by the Oasis Visitor Center in Twentynine Palms. And do take advantage of Ranger-led programs. This issue of the Guide includes an abbreviated schedule of programs. Additional programs, hikes, and special events are posted on campground bulletin boards.

The future of the national park service is as strong as the support and commitment of the people we serve. With your assistance Joshua Tree will survive intact for the enjoyment of generations to follow. Rest assured that the staff and volunteers at Joshua Tree National Park are committed to doing our part to defend and protect this special place.

Should you have any concerns or recommendations for improving the management of your national park, please write me at 74485 National Park Drive, Twentynine Palms, CA 92277.



Ernest Quintana, Superintendent

the weather warms at higher elevations, we will be able to watch spring move out of the lower Colorado Desert and up into the higher Mojave Desert. Except for pink flowering beavertail, wildflowers precede cactus. At lower elevations, below Wilson Canyon toward the Cholla Cactus Garden, beavertail is often in bloom in February. Usually Mojave mound cactus can be found along the roads in Queen Valley by the end of April. Other cacti will bloom in May and June. Geology Tour Road, Juniper Flats, and Covington Flats should be good choices for wildflower hunting this spring. Hikers might walk the 3-mile 49 Palms Canyon trail for its variety of flowering plants, or if a longer hike is desired, try the Lost Palms Oasis trail (7.5 miles). Ocotillo plants grow along the start of the trail and the end of the trail is one of the few places where scarlet locoweed is found.

March through June is the usual wildflower season at Joshua Tree. However, this year the spring season, although limited in species numbers and abundance, began in December. Whatever happens during the rest of this spring, it will be a different sort of wildflower season. Take the time to get out and walk around, take lots of photographs, but don't pick the wildflowers!

*Author Bill Truesdell is the former Chief of Interpretation at Joshua Tree.*

## Area Information

For information about accommodations and attractions in surrounding communities, you may contact the following chambers of commerce:

### Indio

82503 Hwy 111  
Indio, CA 92201  
(760) 347-0676  
indiochmbr@aol.com  
<http://www.indiochamber.org>

### Joshua Tree

P.O. Box 600  
Joshua Tree, CA 92252  
(760) 366-3723  
<http://www.joshua-tree.com>

### Palm Springs

190 W. Amado Rd.  
Palm Springs, CA 92262  
(760) 325-1577  
PSChamber@worldnet.att.net  
<http://www.pschamber.org>

### Twentynine Palms

6455 Mesquite Ave. Unit A  
Twentynine Palms, CA 92277  
(760) 367-3445

### Yucca Valley

56300 29 Palms Hwy.  
Yucca Valley, CA 92284  
(760) 365-6323  
yvcc@desertgold.com  
<http://www.desertgold.com>

## Backcountry Camping *and* Hiking

Joshua Tree National Park is a backpacker's dream with its mild winter climate and interesting rock formations, plants, and wildlife. It embraces 792,000 acres of which 630,800 acres 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 park regulations. If you have any questions, ask a ranger.

### Registering

If you will be out overnight, register at a backcountry board. The map in this publication indicates the location of the twelve backcountry boards. An unregistered vehicle or a vehicle left overnight somewhere other than at a backcountry board is a cause for concern about the safety of the vehicle's occupants. It is also subject to citation and towing.

### Locating your camp

Your wilderness camp must be located one mile from the road and 500 feet from any trail.

Make yourself aware of any day-use areas in the vicinity (they are indicated on the topo maps at the backcountry boards) and make your camp outside.

Washes may seem inviting places to sleep because they are relatively level, but it is important to realize that they got that way because flash floods bulldozed the rocks and vegetation out of the way.

### Domestic issues

Water sources in the park are not potable and are reserved for wildlife so you will have to carry in an adequate supply for drinking, cooking, and hygiene. You will want to give some thought to the trade-off between the water required to hydrate dried foods versus the weight of canned and fresh. If you want to heat something you will need to pack in a stove and fuel as fires are prohibited in the backcountry.

Bring plastic bags to hold your garbage so you can pack it out. Buried trash gets dug up by animals and scattered by the wind; it is not a pretty sight. Do bury human waste in "cat" holes six inches deep. Don't bury your toilet paper; put it in plastic (zip-locks work nicely) and pack it out. Leave no trace, as they say.

### Hiking

It is easy to get disoriented in the desert; washes and animal trails crisscross the terrain obscuring trails, boulder piles are confusingly similar, and there are not many prominent features by which to guide yourself. Do get yourself a topographic map and compass and learn how to use them before you head out.

Know your limitations. You should not attempt to climb cliffs or any steep terrain without adequate equipment, conditioning, and training. Accidents can be fatal.

Carry a minimum of one gallon of

water per person per day just for drinking; two gallons in hot weather or if you are planning a strenuous trip. You will need additional water for cooking and hygiene.

And don't forget the other essentials: rain protection, a flashlight, a mirror and whistle, a first aid kit, pencil and paper, a pocket knife, and extra food.

### Coping with the weather

That old desert sun can damage eyes as well as skin. Wear a hat and sunglasses and use sunblocking lotion liberally.

Temperature changes of 40 degrees within 24 hours are common. Bring a variety of clothes that you can layer on and off as conditions change.

Although rain is relatively rare in the desert, when it does come it can really pour down. Even when it isn't raining where you are, rain in the mountains can run off so fast as to cause flash floods. Stay alert.

### Stock animals

To minimize vegetation damage and soil erosion, stock animals are restricted to marked trails and washes.

Plan to pack along sufficient water and feed (pellet form only) as your animals are not allowed to drink from any of the water sources in the park nor graze the vegetation.

A permit is required if you wish to camp in the backcountry with horses or other stock animals. You may call (760) 367-5545 to request a permit.

## Black Rock Canyon Offers Good Hiking and Much More

Located in the northwest corner of the park, the road to Black Rock Canyon deadends at the campground. Campsites are located on a hillside at the mouth of the canyon surrounded by Joshua trees, junipers, cholla cacti, and a variety of desert shrubs. Spring blooms usually begin with the Joshua trees in late February followed by shrubs and annuals through May.

This quiet, family campground is a good introduction for first-time campers. Each campsite has a picnic table and fire ring with restrooms and water nearby. If you forget to bring your firewood, shopping facilities are only five miles away in the town of Yucca Valley. Campsites vary in size and can accommodate both tents and RVs. A day-use picnic area and dump station are also available. For horse owners, a separate area is provided for overnight

camping or staging a ride.

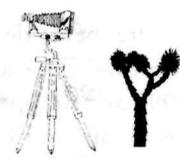
Campers register and pay camping fees at the Nature Center located in the middle of the campground. The staff at this small visitor center can help plan your hikes and sightseeing. Maps, books, nature guides, and children's activity books may be purchased.

The hills behind the campground offer a variety of hiking trails including the Hi-View Nature Trail. The interpretive guide for this trail, available at the Nature Center, identifies the vegetation along this scenic 1.3-mile walk. For those looking for longer trails, Eureka Peak, Panorama Loop, and Warren Peak take hikers to ridgelines overlooking the often snowy peaks of San Jacinto and San Gorgonio. The trailhead for a 35-mile section of the California Riding and Hiking Trail is located at Black Rock. Backpackers can register at the

backcountry board here for overnight wilderness trips.

But you don't have to hike to enjoy Black Rock! Wildlife sightings are frequent in the campground. Visitors often encounter ground squirrels, jackrabbits, and cottontails and frequent bird sightings include cactus wrens, Gambel's quail, great-horned owls, jays, and roadrunners. A serious birder might be rewarded with a glimpse of a Scott's Oriole or LeConte's thrasher. More elusive species such as bobcat, bighorn sheep, mountain lions, desert tortoises, and mule deer have all been seen in the area. As the sun sets, listen for the "singing" of coyotes living on the outskirts of the campground. Please do not feed wild animals in Joshua Tree National Park. People food is unhealthy for them and they can become aggressive and harm you.

On your mark, get set, for the



### 5th Annual 24 Hours Photographing Joshua Tree National Park

Join other photographers for 24 hours capturing the varied beauty of Joshua Tree National Park. On April 3, at 4:30 PM, participants will meet at park headquarters to receive final instructions and pose for a group photograph. One second after midnight, the 24 hours begins!

Participating photographers may submit prints for the resulting photo mural. The deadline is April 20. That is also the deadline for submitting prints and slides for proposed magazine articles.

Photographers at all skill levels are invited to participate. There is no fee, however you must register with a participating school or with Director Tim Terrell.

For registration information, send a self-addressed, stamped envelope to: Tim Terrell, PO Box 1134, 29 Palms, CA 92277.

## Art Festival

April 17, 18, & 19  
9 AM to 5 PM

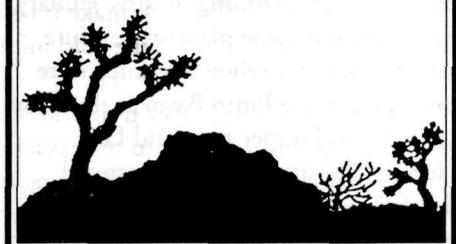
The annual Joshua Tree National Park Art Festival will be held at the Oasis Visitor Center in Twentynine Palms.

### Subject Matter:

Landscape, wildlife, people, history, and archaeology pertinent to Joshua Tree National Park and the deserts of the Southwest.

### Media:

Sculpture, drawing, painting, textiles, photography, and three-dimensional forms.



## Campgrounds

Campgrounds	Elevation	Sites	Fee	Group Sites	Group Fee	Horse Camp	Water	Flush Toilets	Chemical Toilets	Tables	Fire Grates	Dump Station	Camping Regulations
Belle	3800'	18							*	*	*		<p>There is a 30-day camping limit each year. However, only 14 nights total may occur from October through May.</p> <p>Campsites are limited to six people, two tents, and two cars. Group sites accommodate ten to seventy people.</p> <p>Beginning March 15, obtain reservations for sites at Black Rock, Indian Cove, and all group sites by calling 1-800-365-2267. Other campgrounds are first-come, first-served. It is wise to arrive as early as possible.</p> <p>Showers are not available, and there are no hookups for recreational vehicles.</p> <p>Water is available at Oasis Visitor Center in Twentynine Palms, Indian Cove Ranger Station, West Entrance, and Black Rock and Cottonwood Campgrounds.</p> <p>If you wish to have a campfire, bring your own firewood as all vegetation within the park is protected.</p> <p>Quiet hours are from 10 PM to 6 AM This includes generators and motors.</p>
Black Rock	4000'	100	\$10			\$10	*	*		*	*	*	
Cottonwood	3000'	62	\$8	3	\$25		*	*		*	*	*	
Hidden Valley	4200'	39							*	*	*		
Indian Cove	3200'	101	\$10	13	\$20/35				*	*	*		
Jumbo Rocks	4400'	125							*	*	*		
Ryan	4300'	31							*	*	*		
Sheep Pass	4500'			6	\$20/35				*	*	*		
White Tank	3800'	15							*	*	*		

Be an inspiration to others; leave your campsite cleaner than you found it.

## What to See and Do

For a first-time visitor the desert may appear bleak and drab. Viewed from the road, the desert only hints at its vitality. Closer examination reveals a fascinating variety of plants and animals. A rich cultural history and surreal geologic features add to the attraction of this place. Joshua Tree National Park offers visitors endless opportunities for exploration and discovery. Depending on the number of hours you have to spend, your interests, and energy, here are some ideas to consider:

**IF YOU HAVE FOUR HOURS OR LESS**, begin your tour at a park visitor center. Park staff will be happy to provide you with current information about conditions in the park as well as answers to your questions.

With limited time you may want to confine your sightseeing to the main park roads. Many pullouts with wayside exhibits dot the park roads. A list of nature trails and short walks appears in this publication. Consider experiencing at least one of these walks during a short park visit.

On clear days the vista from Keys View extends beyond Salton Sea to Mexico and is well worth the additional 20-minute drive.

**IF YOU PLAN TO SPEND AN ENTIRE DAY**, there will be time to walk several nature trails. If you visit on a weekend from mid-October to mid-December or mid-February through May, you can participate in a ranger-led program. Check at the visitor centers and on campground bulletin boards 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. A list of hikes is included in this publication and trail information can be obtained from visitor centers.

Some visitors like to experience the desert from the seat of a mountain bike. The park offers an extensive network of dirt roads that make for less crowded and safer cycling than the paved main roads. A selection of road trips is included in the article titled Backcountry Roads in this publication.

Joshua Tree has gained international attention as a superb rock-climbing area. Many visitors enjoy just watching the rock climbers in action.

**WITH MORE THAN ONE DAY IN THE PARK**, your options increase. There are nine campgrounds and backcountry camping is permitted. You will find information concerning camping and backcountry use elsewhere in this publication.

Books and topographic maps, available at park sales areas, give information needed for longer hikes. For "peak baggers," the park has ten mountains over 5,000 feet (1,524 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 park's cultural history.

Whatever you choose, your time will be rewarding. The desert holds much more than what is readily apparent to the casual observer. **A note of caution:** The desert, fascinating as it is, can be life-threatening for those unfamiliar with its potential dangers. It is essential that you carry water with you—even if you are only driving through. Cars break down; keys get locked inside; accidents happen.

## BACKCOUNTRY ROADS

for mountain bikes and four-wheel drive vehicles

Mountain bikes and four-wheel drive vehicles are welcome in the park. For your own safety and for the protection of the natural features of the park please 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 park are narrow without paved shoulders. Curves, boulder piles, and Joshua trees restrict the vision of bikers and motorists. The unpaved roads in the park are safer for bikes and offer many opportunities to explore the area.

Here is a sampling:

### Pinkham Canyon Road

This challenging 20-mile (32.4-km) road begins at Cottonwood Visitor Center, travels along Smoke Tree Wash, and then cuts down Pinkham Canyon. Sections of the road run through soft sand and rocky flood plains. The road connects to a service road next to I10.

### 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, and winds through canyons in the Eagle Mountains. The first 9 miles (14.5 km) are within the park 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 too dangerous to approach.

### Old Dale Road

This 23-mile (37.3-km) road starts at the same point as Black Eagle Mine Road. The first 11 miles (17.8 km),

cross Pinto Basin, a flat, sandy dry lake bed. Leaving the basin, the road climbs a steep hill, then crosses the park boundary. A number of side roads veer off toward old mines and residences. The main road leads to HWY 62, 15 miles (24.3 km) east of Twentynine Palms.

### Queen Valley Roads

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

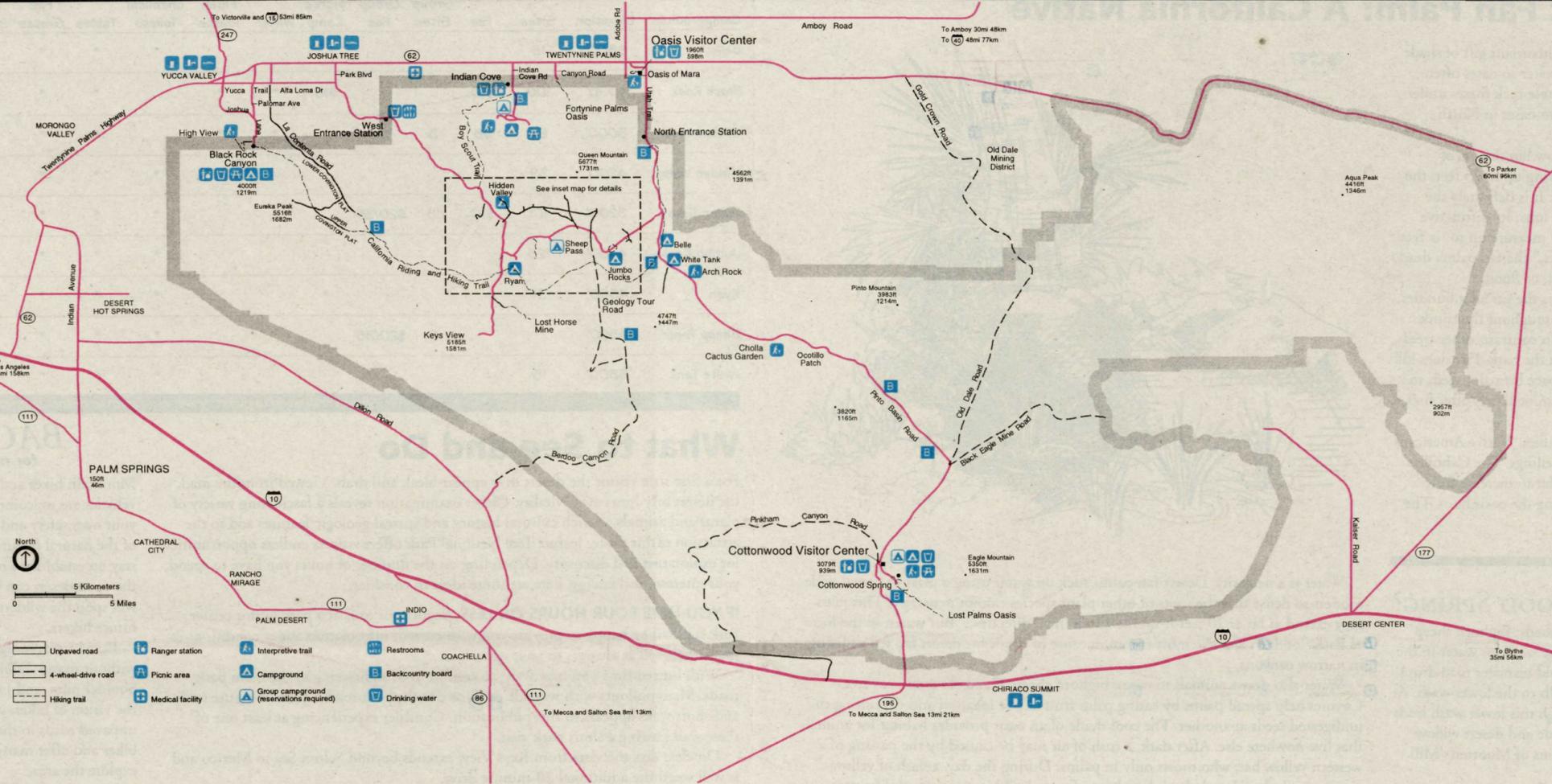
### Geology Tour Road

The road turns south from the paved road 2 miles (3.2 km) west of Jumbo Rocks Campground. 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 explores Pleasant Valley. A guide is available at the beginning of the road.

### Covington Flats

The dirt roads in Covington Flats offer access to some of the park's largest Joshua trees, as well as to junipers, pinyon pines, and some of the lushest vegetation in the high desert. From the Covington Flats picnic area to Eureka Peak, is 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 if you ride or drive over to the backcountry board, a starting point for excellent hiking.

How Far Is It?	Oasis of Mara	Cottonwood	West Entrance
Belle Campground	9	28	28
Black Rock Canyon	28	73	17
Cap Rock	19	40	16
Cholla Cactus Garden	18	20	36
Cottonwood	38	0	56
Hidden Valley	20	42	14
Indian Cove	10	48	13
Interstate 10	45	7	35
Jumbo Rocks	11	33	23
Keys View	24	45	21
Oasis of Mara	0	38	34
Ryan Campground	18	39	16
Sheep Pass Campground	16	37	19
West Entrance	34	51	0
White Tank Campground	11	27	29



North ↑

0 5 Kilometers  
0 5 Miles

Unpaved road  
 4-wheel-drive road  
 Hiking trail

Ranger station  
 Picnic area  
 Medical facility

Interpretive trail  
 Campground  
 Group campground (reservations required)

Restrooms  
 Backcountry board  
 Drinking water

## NATURE TRAILS



Trail	Mileage	Starting Point
Arch Rock	.3-mile loop (5-km)	White Tank Campground, opposite site 9
Barker Dam	1.1-mile loop (1.8-km)	Barker Dam parking area
Cap Rock	4-mile loop (6-km)	Cap Rock parking area, at the junction of Park Blvd and Keys View Road
Cholla Cactus Garden	.25-mile loop (4-km)	20 miles north of Cottonwood Visitor Center
Cottonwood Spring	1-mile (1.6-km)	Cottonwood Spring parking area
Hidden Valley	1-mile loop (1.6-km)	Hidden Valley picnic area
High View	1.3-mile loop (2.1-km)	Northwest of Black Rock Campground
Indian Cove	.6-mile loop (1-km)	West end of Indian Cove Campground
Keys View	.25-mile loop (4-km)	Keys View
Oasis of Mara	.5-mile loop (.8-km)	Oasis Visitor Center, Twentynine Palms
Skull Rock	1.7-mile loop (2.7-km)	Jumbo Rocks Campground, just beyond loop E

**A Special Thanks to our Sponsors —**  
 This publication has been produced for Joshua Tree National Park visitors through generous contributions from the following businesses, organizations, and individuals. The Joshua Tree National Park Association and the National Park Service are grateful for their support.

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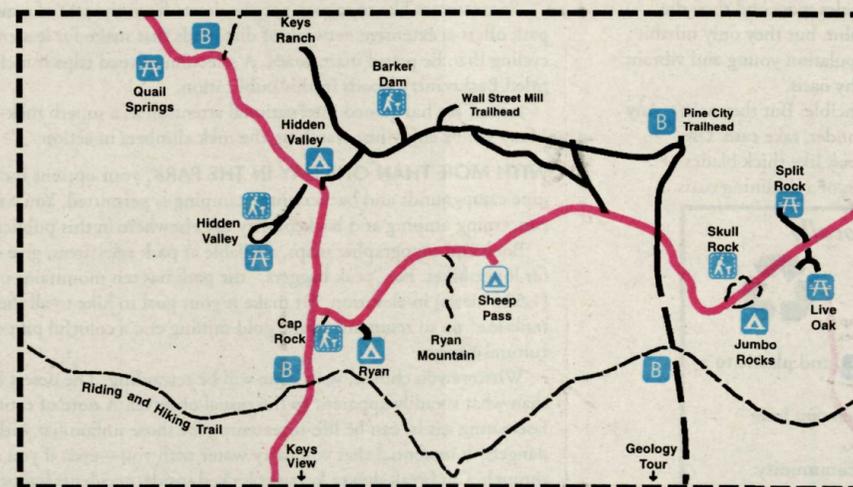
*Joshua Tree Guide*  
 Produced by the employees and the volunteers of Joshua Tree National Park and Joshua Tree National Park Association.  
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 Printed by Reed Printing on recycled paper.

## Spring Programs

March 7 – May 2

Check bulletin boards and at visitor centers for additional programs.

	Fridays	Saturdays	Sundays
<b>Ranch Tours</b> 2 hours, ½ mile		10 AM & 1 PM Desert Queen Ranch	10 AM & 1 PM Desert Queen Ranch
<b>Nature Walks</b> 1 hour, 1 mile		1 PM Cottonwood	10 AM Cottonwood
<b>Evening Programs</b> 45 minutes	7PM Jumbo Rocks	7 PM Jumbo Rocks, Cottonwood, Black Rock, Indian Cove	



## HIKING TRAILS



Trail	Roundtrip Mileage	Time	Starting Point	Trail Description
Boy Scout	16 miles (25.8 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 board 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 Hwy 62	Several stands of fan palms, evidence of past fires, and pools of water are found at the oasis. The plants in this area are especially fragile, so walk lightly. 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 (1,609 meters). Moderately strenuous.
Lost Palms Oasis	7.5 miles (11.2 km)	4-6 hours	Cottonwood Spring or Cottonwood 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)	2-3 hours	Cottonwood Spring or Cottonwood Campground	Excellent views of the Eagle Mountains and Salton Sea. Summit elevation: 3,371 feet (1,027 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 (1,664 meters). Moderately strenuous.

Thirty-five miles of the California Riding and Hiking Trail pass through the park. Access to the trail is at its junction with Covington Flats, Keys View, and Squaw Tank (Geology Tour) Roads; at Ryan Campground; south of Belle Campground; and near the north entrance to the park. 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.

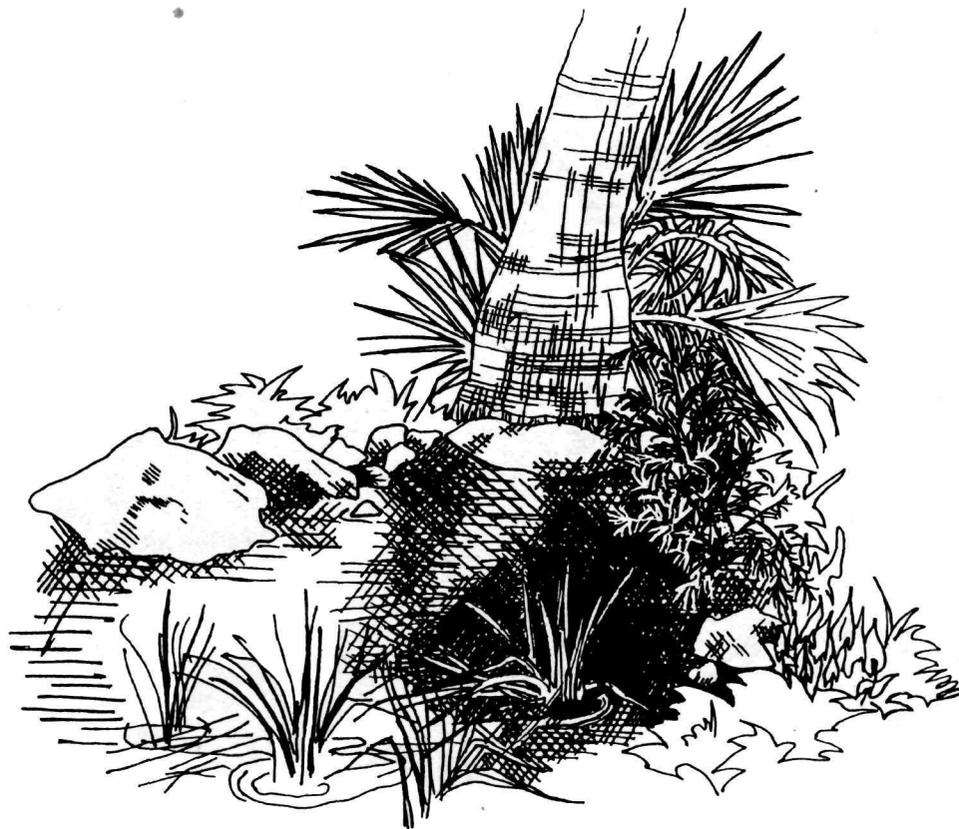
## The Desert Fan Palm: A California Native

In an otherwise hot and sparse environment, palm oases are a luxuriant gift of shade and solace. The verdant display requires a constant supply of water so oases often occur along fault lines, where uplifted layers of hard impermeable rock forces underground water to the surface. There are only 158 desert fan palm oases in North America. Five are located in Joshua Tree National Park.

The desert fan palm, *Washingtonia filifera*, is native to the low hot deserts of Southern California where it can live for 80 to 90 years. Towering up to 75 feet, the desert fan palm is among the tallest of North American palms. It is definitely the heaviest; a mature desert fan palm can weigh as much as three tons. Its distinctive leaves are shaped like a fan and folded like an accordion. They measure up to six feet in length and are nearly as wide. Looking much like "petticoats," the fan palm's dead leaves remain attached to its trunk until removed by fire, wind, or flood.

Fire is beneficial for palms and rarely kills an adult. In palms the vascular bundles, those tubes that transport water and nutrients, are scattered throughout the trunk. This arrangement provides insulation from the heat of a fire. In contrast, other trees such as oaks have all their vascular tissue in a ring just beneath the bark. Fire does kill young palms, but it also removes competitors and opens up space for palm seeds to germinate. In fact, desert fan palms increase seed production immediately after fires. A healthy palm can produce as many as 350,000 seeds.

People have been attracted to palm oases since prehistoric times. Native Americans ate the palm fruit and used the fronds to build waterproof dwellings. The Cahuillas (pronounced: Ka-wee-yahs) periodically set fire to oases in order to increase fruit production and to remove the sharp-edged palm fronds littering the oasis floor. The Cahuillas also planted palm seeds in promising locations.



### WHERE IN THE PARK IS COTTONWOOD SPRING?

Cottonwood Spring Oasis, one of the best kept secrets in Joshua Tree National Park, is just seven miles from the southern entrance to the park. The spring, the result of earthquake activity, was used for centuries by the Cahuilla Indians, who left bedrock mortars and clay pots, or ollas, in the area.

Cottonwood Spring was an important water stop for prospectors, miners, and teamsters traveling from Mecca to mines in the north. Water was necessary for gold processing, so a number of gold mills were located here. The remains of an arrastra, a primitive type of gold mill, can be found near the spring, and concrete ruins mark the sites of two later gold mills in the area.

The cottonwoods that give their name to the spring are not native to this area. They were planted around the turn of the century by some early resident, and the palms were probably planted in the 1920s.

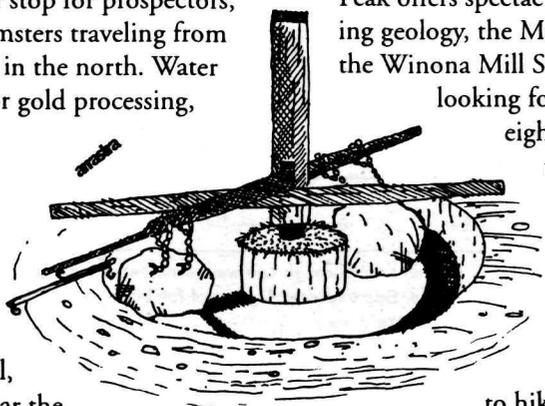
A number of hikes begin at Cottonwood Spring. A short, easy walk down Cottonwood Wash leads past a second oasis to a dry falls. In wet years, the falls can become a scene of rushing water

and red-spotted toads. Bighorn sheep often come up the wash for water in the early hours. An old teamster road drops down past the falls to the lower wash. A short hike through this lower wash leads through palo verde and desert willow trees to the remains of Moorten's Mill Site.

The 3-mile loop trail to Mastodon Peak offers spectacular views, interesting geology, the Mastodon Mine, and the Winona Mill Site. And, for those looking for a longer hike—eight miles round trip—and the largest stand of fan palms in the park, the Lost Palms Oasis trail is a sure winner. But you don't have to hike to enjoy Cotton-

wood Spring. This is one of the best birding spots in the park; so bring your binoculars and sit a spell.

The campground, which has water and restrooms, is located one-half mile from Cottonwood Spring via a signed nature trail; there are also shaded picnic tables in the campground. To learn more about the plants, animals, and history of this fascinating place, join a ranger-led program; hikes, walks, and campfire programs are offered on weekends throughout most of the year.



Water is a necessity. Desert fan palms suck up water using a mass of pencil-wide rootlets so dense that the roots of other plant species cannot penetrate. This mass may extend as far as 20 feet from the trunk in all directions. But water, in the form of flash floods, is also the most common cause of death for desert fan palms living in narrow canyons.

Water also draws animals to oases: bighorn sheep, Gambel's quail, coyotes. Coyotes help spread palms by eating palm fruit at one location and depositing the undigested seeds at another. The cool shade of an oasis provides habitat for animals that live nowhere else. After dark, a rush of air may be caused by the passing of a western yellow bat, who roosts only in palms. During the day, a flash of yellow-orange might be a hooded-oriole, who prefers to build its woven sack-like nest under the large green leaves of the desert fan palm. The dime-sized holes seen in the trunks of palms are exit holes of the two-inch, blue-black, giant palm boring beetle, *Dinapate wrightii*, who lives exclusively in palm oases.

The larvae of the *Dinapate* beetle spends about five years chewing tunnels within the trunk of a desert fan palm. The chewing is so loud that flickers use the noise to locate the larvae. Successful larvae pupate within the trunk then chew their way out. Because their rear end is wider than their front end, they exit going backwards to avoid getting stuck. Emerging in June, males and females mate and then die within a few weeks. Eventually these beetles can kill a palm, but they only inhabit older trees. Giant palm boring beetles keep the palm population young and vibrant. The presence of these beetles is actually a sign of a healthy oasis.

Palms stand straight and tall, looking proud and invincible. But they aren't. Any place can be over loved. As you explore these oases of wonder, take care. Use existing paths. Watch out for young palms—seedlings look like thick blades of grass. We do not want the presence of people to be a sign of a declining oasis.

#### Think Globally — Act Locally

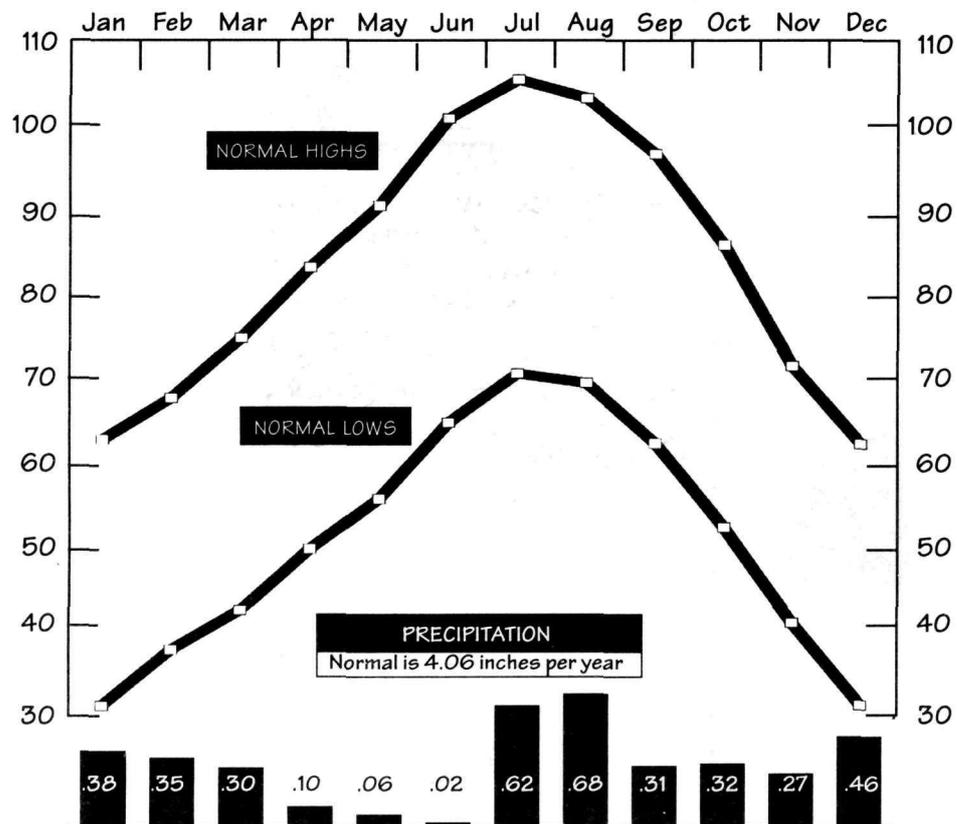


**REDUCE  
REUSE  
RECYCLE**



- Bring your aluminum and metal cans, glass, and plastic to a campground recycling center.
- Share or recycle this *Joshua Tree Guide* when you have finished reading it.
- Participate in recycling programs in your community.

## The Weather



Measurements were taken at 1,960 feet (597 m). You can expect seven to twelve degrees cooler temperatures and 3.5 inches more precipitation at higher elevations.

## Rockpiles

The geologic landscape of Joshua Tree has long fascinated visitors to this desert. How did the rocks take on such fantastic shapes? What forces sculpted them?

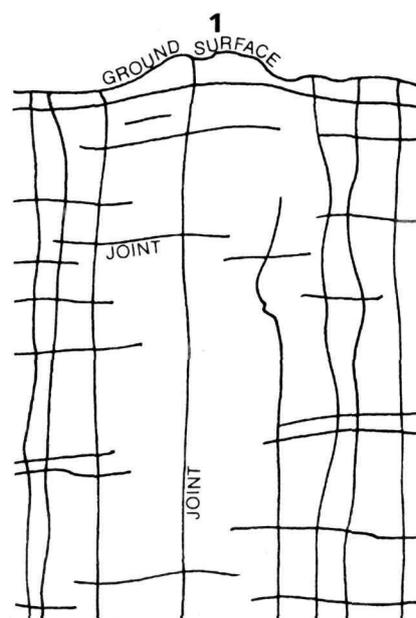
Geologists believe the face of our modern landscape was born more than 100 million years ago. Molten liquid, heated by the continuous movement of Earth's crust, oozed upward and cooled while still below the surface. These plutonic intrusions are a granitic rock called monzogranite.

The monzogranite developed a system of rectangular joints. One set, oriented roughly horizontally, resulted from the removal—by erosion—of the miles of overlying rock, called gneiss (pronounced "nice"). Another set of joints is oriented vertically, roughly paralleling the contact of the monzogranite with its surrounding rocks. The third set is also vertical but cuts the second set at high angles. The resulting system of joints tended to develop rectangular blocks. (figure 1) Good examples of the joint system may be seen at Jumbo Rocks, Wonderland of Rocks, and Split Rock.

As ground water percolated down through the monzogranite's joint fractures, it began to transform some hard mineral grains along its path into soft clay, while it loosened and freed grains resistant to solution. Rectangular

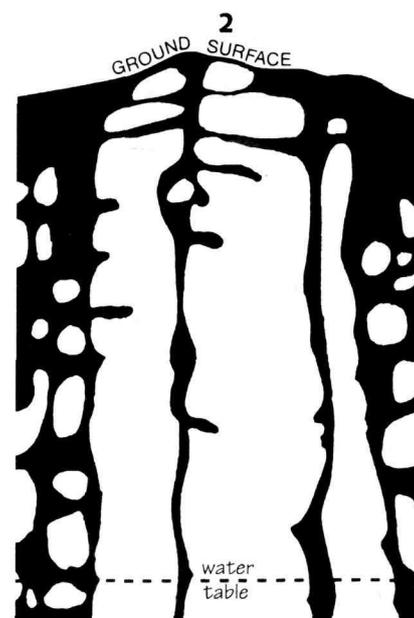
stones slowly weathered to spheres of hard rock surrounded by soft clay containing loose mineral grains. Imagine holding an ice cube under the faucet. The cube rounds away at the corners first, because that is the part most exposed to the force of the water. A similar thing happened here but over millions of years, on a grand scale, and during a much wetter climate. (figure 2)

After the arrival of the arid climate of recent times, flash floods began washing away the protective ground surface. As they were exposed, the huge eroded boulders settled one on top of another,



creating those impressive rock piles we see today. (figure 3)

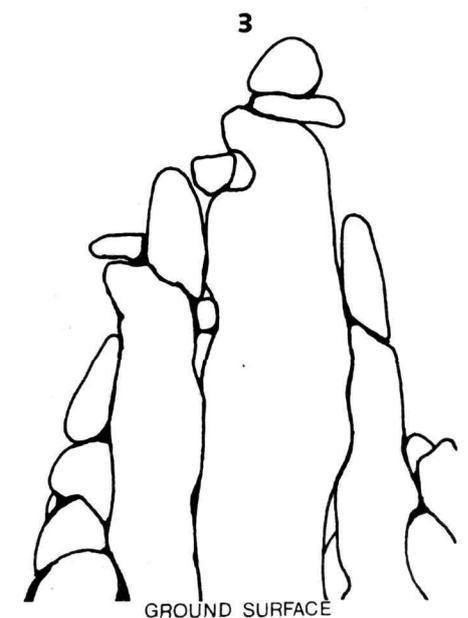
Visitors also wonder about the "broken terrace walls" laced throughout the boulders. These are naturally occurring formations called dikes. Younger than the surrounding monzogranite, dikes were formed when molten rock was pushed into existing joint fractures. Light-colored aplite, pegmatite, and andesite dikes formed as a mixture of quartz and potassium minerals cooled in these tight spaces. Suggesting the work of a stonemason, they broke into uniform blocks when



they were exposed to the surface.

Of the dynamic processes that erode rock material, water, even in arid environments, is the most important. Wind action is also important, but the long-range effects of wind are small compared to the action of water.

The erosional and weathering processes operating in the arid conditions of the present are only partially responsible for the spectacular sculpturing of the rocks. The present landscape is essentially a collection of relict features inherited from earlier times of higher rainfall and lower temperatures.



## CAMPGROUND ASTRONOMY

Camping away from city lights gives many of us city dwellers a chance to see the sky as we have never seen it. A great way to introduce someone to the "dark sky" is to tour the Milky Way with binoculars.

First just lay back on the ground and gaze at the band of light. Notice how it is brighter in places, with clumps of light and dark streaks where stars seem to be absent. Realize that the glow of light is from stars so far away that we can't quite make them out. The dark lanes are actually interstellar dust that blocks our view. The clumps of light are clouds of stars.

Find one of those star clouds and, without taking your gaze away from it, raise your binoculars to your eyes. The cloud will resolve into hundreds of stars, with perhaps smaller clumps and hazy patches in the field of view.

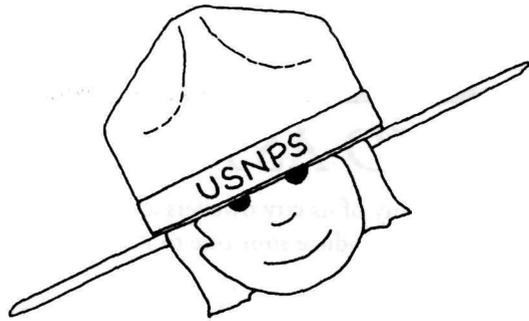
Notice how the milky way seems to be very bright and dense to the south near the horizon? You are looking toward the center of our galaxy, where the stars are richest. The constellations Sagittarius and Scorpion lie in this direction.

Just west of Sagittarius is Scorpion, one of the few constellations that look like its name. Scorpion is noted by the bright red star Antares, located in the scorpion's neck. Look at Antares with binoculars. See the large fuzzy ball of light next to it? That is a large globular cluster.

Turn your attention northward, above and to the left of the stars of Sagittarius. You will see a large cloud of stars. This is the Scutum star cloud. With binoculars you should easily see a hazy patch of light. This is a beautiful open star cluster.

As we move farther north, higher in the sky, we see the star clouds in the constellation Cygnus, the swan. This constellation also looks like its name. We can see the neck pointing south, and the wings stretched east and west. The bright star behind the wings is Deneb, the "tail" of Cygnus.

To help identify the many objects you will find with binoculars, you will want a star chart. A circular "star finder", also known as a "planisphere", will show the location of many celestial objects.



# Hey there, Junior Ranger!

Complete at least five of the activities below and become a Junior Ranger at Joshua Tree National Park. When you have completed your work, take this page to the Oasis or Cottonwood Visitor Center or to a ranger-led evening program. A ranger will check your work and give you an official Junior Ranger badge. **Have fun!**

## Terrific Tracks

Many animals live in Joshua Tree National Park. Read the clues below to help you unscramble a few of these animal names. Then draw a line between the animal names and the tracks they would make. HINT: You will have one extra track at the end. Do you know what animal makes it?

- ❶ It builds its nest of cholla cactus for protection and decorates it with shiny objects taken from campsites.

**TAWODOR =**

- ❷ This bird has a forward-curving topknot and would rather run than fly.

**ULAQI =**

- ❸ This large mammal has horns and is an excellent rock climber.

**NRGOIBH EEHSP =**

- ❹ Females of this animal produce 3–4 litters of 4–7 young each year.

**IATOOCTNTL =**

- ❺ The park is home to many species of this reptile.

**DAZILR =**

- ❻ This feline has a stubby tail and can be active both day and night.

**TBBAOC =**

- ❼ This animal does not drink water because its body is able to unlock the water stored in the dry seeds it eats.

**GAROKNAO ART =**

- ❽ This solitary hunter has bigger ears than its cousin, the gray fox.

**TIK XFO =**



## Rocks

Joshua Tree National Park is famous for its rock formations. The *Wonderland of Rocks* has many of these large boulder piles. The rocks on the surface today were molten 83 million years ago! People come from all over the world to see, study, and climb on these rocks. People who study rocks are called geologists. Many of the rock formations have names due to their interesting shapes. Sketch your favorite rock formation in the park. What would you call it?

## Map Mania

Get to know Joshua Tree National Park by playing "Map Mania." Using the official map and guide to the park (available at park entrance stations and visitor centers), answer the questions below by yourself or race friends and family members for the correct responses.

- ❶ How many campgrounds are in the park?
- ❷ Name the four mammals pictured on the back of the map.
- ❸ How many paved road entrances (red lines) are there into the park?
- ❹ What highway runs along the north boundary of the park?
- ❺ What can be seen at "Point of Interest #4?"
- ❻ Lost Palms Oasis is what "Point of Interest" number?
- ❼ What mountain range is in the far eastern portion of the park?
- ❽ What is the symbol on the map for a picnic area?
- ❾ Dirt roads are signified by what on the map?
- ❿ Is water available at the Cottonwood Visitor Center?
- ⓫ What is the transition zone?
- ⓬ Keys View lies in what mountain range?
- ⓭ What type of vehicle do you need on the Geology Tour Road?

## Native Americans

Hike the Barker Dam trail with an adult and visit the rock art site. Sketch two of the designs you see on the rocks in this box. Remember not to do rubbings. Rock art is protected.

What sort of vandalism occurred at this site?

Why should we protect cultural sites?

**Plant Sketching**

Desert plants have many different adaptations to survive the summer heat. Some plants can store water. Some use little white hairs on their leaves or white spines to reflect back the sun's rays. Other plants have hairs, spines, or leaves that provide shade for their stems. Still others have a waxy coating on their stems and leaves to prevent water loss.

Draw plants that you find with these adaptations. You can use a plant guide or ask a ranger to help identify the plants you drew so you can label your sketches.

Remember not to pick any plants inside the park!

*This plant stores water.*

plant name = \_\_\_\_\_

*This plant has a waxy coating.*

plant name = \_\_\_\_\_

*This plant reflects sunlight.*

plant name = \_\_\_\_\_

*This plant provides its own shade.*

plant name = \_\_\_\_\_

- Answers**
- TERRIFIC TRACKS:**
- 1) woodrat, e
  - 2) quail, c
  - 3) bighorn sheep, f
  - 4) cottontail, h
  - 5) lizard, g
  - 6) bobcat, d
  - 7) kangaroo rat, b
  - 8) kit fox, i
- MAP MANIA:**
- 1) mine
  - 2) bobcat, coyote, jackrabbit, kangaroo rat
  - 3) six
  - 4) Highway 62 or Twentynine Palms Highway
  - 5) Barker Dam
  - 6) !
  - 7) Coxcomb Mountains
  - 8)  8
  - 9) gray lines
  - 10) yes
  - 11) where the Mojave and Colorado Deserts meet
  - 12) Little San Bernardino Mountains
  - 13) four-wheel drive
- WATER:**
- 1) five
  - 2) flash floods
  - 3) less than 5 inches
  - 4) No, it's too salty
  - 5) Loss of moisture from leaves/minimize loss of moisture
  - 6) Barker Dam/to hold water for cattle and mining/wildlife uses it today
  - 7) 1 gallon/2 gallons
  - 8) personal answers

**Wordseek**

**Find these words:** Bats, Bighorn, Bobcat, Cholla, Coyote, Creosote, Hawk, Joshua Tree, Quail, Rabbits, Snakes, Tortoise, Yucca.

C H L I A U Q B C J  
 H R N E D H A W K O  
 O F E R A B B I T S  
 L S G O O H A I J H  
 L E K B S H C T L U  
 A K C M P O G N S A  
 Q A R T Y S T I U T  
 T N X O L V J E B R  
 Z S T W Y U C C A E  
 Y E T O R T O I S E

**Clean up the Park**

Help keep Joshua Tree National Park clean by picking up litter that you see. Show your bag of litter to a parent or a ranger and have them initial here to verify your hard work.

\_\_\_\_\_

**TAKING THE JUNIOR RANGER PLEDGE**

"I, \_\_\_\_\_, promise to do my best to be a friend of nature. I promise that I will not intentionally pollute, destroy, frighten, or harm plants or animals, however big or small. I realize my actions will be an example to other people older and younger. I promise not to destroy nature while I enjoy nature."

**Attend a Park Program**

Ask at the visitor centers or look on park bulletin boards for the schedule of ranger-led programs offered by the park. Choose one that interests you and your family. When it is finished, have the ranger initial here to verify that you attended. What did you learn from the program?

**Water in the Desert**

Water is essential for survival in the desert. A palm oasis, with its huge fan palm trees, is a place where water occurs naturally at or near the surface of the ground. Visit one of the oases found on your park map to help you find the answers to the questions below. Be creative in where you look for information!

- 1 How many fan palm oases are found within Joshua Tree National Park?
- 2 What water event must you be aware of in Rattlesnake Canyon?
- 3 On average, how many inches of rain does the Mojave Desert get per year?
- 4 Will the water inside a barrel cactus quench your thirst? Why?
- 5 What is transpiration? Why do desert plants have small leaves?
- 6 What man-made water source inside the park was built around 1900? Why was it built then? What purpose does it serve now?
- 7 How much water should a person carry on a day hike in mild conditions? In summer heat?

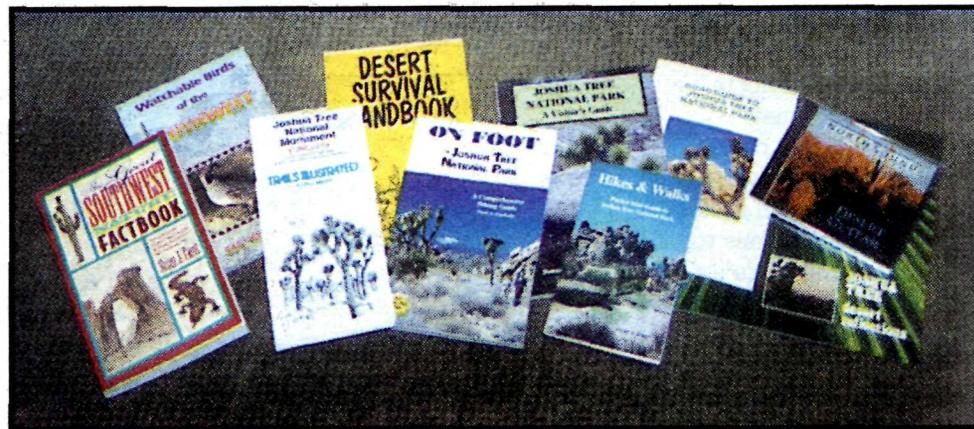
**AWARDING THE JUNIOR RANGER BADGE**

I certify that \_\_\_\_\_ completed at least five of the activities to become a Joshua Tree National Park Junior Ranger.

signed by: Ranger \_\_\_\_\_

## Publications to help you plan your visit to Joshua Tree National Park

The following publications have been selected for their value in planning your trip to Joshua Tree National Park. These items and many more may be ordered by mail, telephone, or FAX from Joshua Tree National Park Association.



### Getting to know Joshua Tree National Park

**A Visitor's Guide to Joshua Tree**, Cates. A delightful, informative guide blending human and natural history. Equally enjoyable by desert rats and first-time visitors. 100 pages PB \$6.95

**Joshua Tree Desert Reflections**, Trimble. An excellent, easy-to-read book covering the geology, biology, and human history of Joshua Tree National Park. Beautiful color photos throughout. 33 pages PB \$4.00

**Joshua Tree Video**. An excellent introduction and overview to Joshua Tree National Park. 30 minutes VHS \$12.95; PAL \$15.95

**Road Guide to Joshua Tree National Park**, Decker. Guides visitors on a driving tour through the land where the Mojave and Colorado Deserts meet. 48 pages PB \$4.95

**On Foot in Joshua Tree**, Furbush. A comprehensive hiking guide featuring 90 park hikes, 40 photos and illustrations, and 26 maps and reference charts. 152 pages PB \$11.95

**75 Great Hikes in and Near Palm Springs**, Ferranti. Covers Joshua Tree, Palm Springs, Indian Canyon, Mecca Hills, San Jacinto, and the Santa Rosas. 167 pages PB \$14.95

**Hikes and Walks**, Knapp. A pocket trail guide to Joshua Tree National Park with maps and descriptions of 26 trails. 34 pages PB \$4.95

**Recreation Map of Joshua Tree**, Harrison. Colorful map of Joshua Tree National Park highlighting points of interest, campgrounds, picnic areas, topographic features, and backcountry roads and trails. \$7.95

**Trails Illustrated Topographic Map of Joshua Tree National Park**. Includes elevations, backcountry camping, hikes, routes, and safety. Waterproof and tearproof. \$8.95

**Joshua Tree Bouldering**, Gingery. A guide to some of the more intriguing rock scrambling opportunities in the park. Includes maps, descriptions, and ratings. 76 pages PB \$9.95

**Wildflowers of Joshua Tree**. Pocket guide to the common flowering plants of Joshua Tree National Park. Includes a map and over 50 color photographs to help with identification in the field. PB \$9.95

**The Joshua Tree**, Gossard. An easy-to-read book filled with fascinating facts and stories about the symbol of the Mojave Desert. 112 pages PB \$9.95

### On the Road in California

**Geology Underfoot in Southern California**, Sharp and Glazner.

An inside view of the southland's often active, sometimes enigmatic, and always interesting landscape. 224 pages PB \$12.00

**California Desert Byways**, Huegel. Backcountry drives in Southern California's desert area, includes Joshua Tree and Death Valley National Parks. 158 pages PB \$18.95

**California Deserts**, Schad. Color photographs of California's desert regions. Features the California Desert Conservation Area, Mojave National Preserve, Joshua Tree National Park, Death Valley National Park, and Anza-Borrego Desert State Park. 103 pages PB \$14.95

**California Roadmap**. Includes a list of public recreational areas and places of interest. \$2.95

**Ghost Towns of California**, Miller. Color photos, maps, historical information, and descriptions fill this booklet. Great for history buffs and travelers alike. 48 pages PB \$4.95

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