



Joshua Tree

NATIONAL MONUMENT

California

JOSHUA TREE *NATIONAL MONUMENT*



UNITED STATES DEPARTMENT OF THE
INTERIOR
NATIONAL PARK SERVICE

J. A. Krug, *Secretary*
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More than a thousand square miles of typical California desert country, preserving magnificent stands of cholla cactus, Joshua-trees, and other desert flora and containing striking granite formations.

JOSHUA TREE NATIONAL MONUMENT was established by Presidential proclamation on August 10, 1936. Located in beautiful desert country, the monument has a gross acreage of 838,560, with 655,961 acres in Federal ownership.

PHYSICAL FEATURES

THIS UNIT of the National Park System presents a notable example of basin and range physiography which is a geological feature formed by block faulting and subsequent extensive erosion under desert conditions. The rounded, elongated mountain ranges of the region rise from saucer-

like valleys. They do not dominate the landscape with precipitous sides, but rather their subdued slopes sink gradually into the rock debris weathered from their sides.

Hundreds of individualistic outcroppings of rock are scattered over a large portion of the monument, particularly in the widespread plateau region which lies at an elevation of approximately 4,400 feet. These piles of rocks have literally been deserted by the hills, of which they were once a part, through typical desert erosion. They, in turn, are being slowly worn down by a combination of heat, cold, wind, and water, and in a decomposed state are gradually build-

Typical rock formation in western portion of monument



ing up the surrounding plain. These rocks, with accompanying Joshua-trees, yucca, cacti, and other desert vegetation, combine to make the area a place of beauty.

The altitude of this monument ranges from 1,000 feet in the eastern end to more than a mile along the ridge of the Little San Bernardino Mountains. The weather is delightful most of the year and particularly on winter days. From records available, it is estimated that the average annual rainfall is more than 5 inches, but there are wide departures from this average. No regular streams of running water are found in the monument, but temporary streams and waterfalls follow every heavy rain in the mountains and rocky areas.

GEOLOGY AND ARCHEOLOGY

PINTO BASIN, in the eastern part of the monument, has long been a region of interest to geologists and archeologists. During the Pleistocene, or glacial, epoch this basin was part of an extensive shallow lake bordered by low mountain ranges. After a period of faulting, folding, and uplifting, a stream of water ran through the outer (eastern) channel of Pinto Wash. During the ensuing years, decrease in precipitation dried out the basin area and made it uninhabitable. But the presence of various artifacts, all highly patinated flints, along the shoreline of this ancient stream indicates that it was once occupied by a primitive people. Although it is impossible to arrive at a definite figure, it is estimated that humans lived in the Pinto Basin 15,000 or 20,000 years ago, leaving for us to find the now well known "pinto point," a flint used on the atlatl, which antedates the arrow.

A branch of the Shoshone Indians made its home in the plateau area in the middle and western portions of the monument several hundred years ago and has also left artifacts. These consist of flints, pottery, beads, metates, manos, etc. On the ceiling and walls of a few caves are found pictographs in red, white, and black.

The last Indians to reside in this area, a branch of Paiutes, left during the year 1913, after the death of one of their number.

HISTORICAL BACKGROUND

GOLD MINING and cattle running, in the order stated, were the earliest activities by white men in this area. Everywhere among the hills will be found the dump of some shaft or tunnel, material laboriously blasted loose and dug out by that supreme optimist, the desert gold prospector. Literally thousands of these claims, once bright hopes for the locators, have been found worthless. But some miners were fortunate and they found veins or pockets rich enough to pay for hauling the ore to mills for reduction. However, in only a few cases was the deposit extensive enough to warrant the erection of a mill and piping water many miles to the mine; among those were the Supply Mine and Virginia Dale Mine in the Pinto Mountains and the Lost Horse Mine in the Little San Bernardino Mountains. Here crumbling buildings and rusting machinery offer mute evidence of the days of great activity and reckless spending. New Dale, now merely a scar in the hills, was once a lively community of more than a thousand persons working in the Virginia Dale and the Supply Mines.

The cattlemen have also left their mark in the monument in the way of numerous "tanks" scattered among the hills. These are small dams of stone or concrete built to retain the rain water in gullies or small valleys to water their stock.

FLORA

CONTRARY to the generally accepted idea of a desert, which usually includes a minimum of plant life, this area is rich in desert vegetation, not only in quantity but also in number of species. Many are extremely rare. Among these is the rapidly diminishing Joshua-tree (*Yucca brevifolia*), one of the most spectacular botanical features of our western deserts. It belongs to the lily family, as do many other tough desert

plants, and attains a height of from 10 to 38 feet. Its cream-white blossoms grow in clusters, 8 to 14 inches long, at the ends of the heavy, angular, erratic branches. It is generally believed that the Mormons gave this giant yucca the name Joshua-tree, seeing in its grotesquely extended "arms" a symbol pointing to the promised land they were seeking. No one has attempted definitely to determine ages of the Joshua "trees," but circumstances of growth indicate that the larger ones have been in existence several hundred years.

The great feathery plume of the Nolina blossom is another striking feature of the landscape in early summer. It is found on rocky slopes in great abundance during favorable years.

There are several cases in and near the monument where groups of the native California-palms (*Washingtonia filifera*) are found. Among these is the splendid group at 49 Palms Canyon, just inside the northern boundary and easily reached by trail. One of the best known stands is at the oasis of Twentynine Palms, outside the northern gateway, known to the early Indian inhabitants as the oasis of Mara. These palms

are the most northern known representatives of this interesting plant. This oasis was named by Col. Henry Washington while conducting a Government survey party through the area in 1855. In his notes he refers to the trees as "cabbage palmetto."

The visitor will notice widely scattered throughout the monument the palo-verde, manzanita, piñon, live oak, juniper, ocotillo, desert-willow, indigo bush or smoke tree, mesquite, catclaw, numerous species of cacti, and a profusion of small bushes, plants, and shrubs whose blossoms lend brilliant patches of color to the desert in the spring after a wet winter. Then there is the common creosote-bush which forms a sea of dark green on every level area and valley.

WILDLIFE

THE WILDLIFE of this desert area, too, is a source of surprise to the visitor. The more common of the larger animals observed are the coyote, bobcat, desert fox, and rabbit. The desert mountain sheep, or bighorn (*Ovis nelsoni*), still survives in limited number and should increase under

Stand of cholla (*bigelovia*) in Pinto Basin



proper protection. Rodents are numerous, ranging in size from the jack rabbit to the little silky pocket mouse, one of the smallest mammals in North America. Many of the smaller species of rodents can, and do, live months at a time without taking water in liquid form.

Reptile life is abundant. Testudo, the desert tortoise, leads in point of interest, followed in this respect by a variety of harmless lizards. A great many of these are in evidence only during the hot days of summer.

Birds are far more numerous than would be expected, particularly at the oases, and are a delight to the ornithologist. During one year more than 125 species were identified. Many of these were migrating, just stopping for a rest on the trip. While some are here during the migration season only, a number make the desert their home throughout the year.

PLACES OF INTEREST

FROM a point on the ridge of the Little San Bernardino Mountains, locally known as Salton View, is one of the most extensive desert terrain views in the West. From an elevation of 5,185 feet the visitor is afforded an unforgettable picture of valleys, mountains, and desert, combined in one magnificent panorama. The Salton Sea, and on clear days the area to the south in Mexico, can be seen. The Salton Sea, 241 feet below sea level, was formed by a break-through from the Colorado River when Imperial Valley was being developed. It filled a basin once a part of the Gulf of Lower California, from which the water had evaporated after it was cut off from the gulf by silt brought down by the Colorado River. In front of the spectator lie the date gardens of Coachella Valley, from which comes a fruit equalled by none grown elsewhere. To the right is the blunt faced escarpment of Mount San Jacinto, rising to a height of 10,805 feet. It lies across the Gorgonio Pass from San Geronio Mountain whose top, snow covered the greater part of the year, reaches an elevation of 11,485 feet. This impressive view is 26 miles from the entrance at Twentynine Palms.

Hidden Valley, years ago used as a cattle rustler's hideout, is another feature attraction of the monument. Completely surrounded by a wall of rocks, it is accessible only on foot and by persons familiar with the entrance.

ACCOMMODATIONS

NEITHER MEALS nor lodging are available in the monument, but may be secured in Twentynine Palms or Joshua Tree.

No regular camp grounds have as yet been developed, but there are several designated camping places within the monument. Campers must carry their own water and fuel. Further information can be obtained at the monument office located in Twentynine Palms.

HOW TO REACH THE MONUMENT

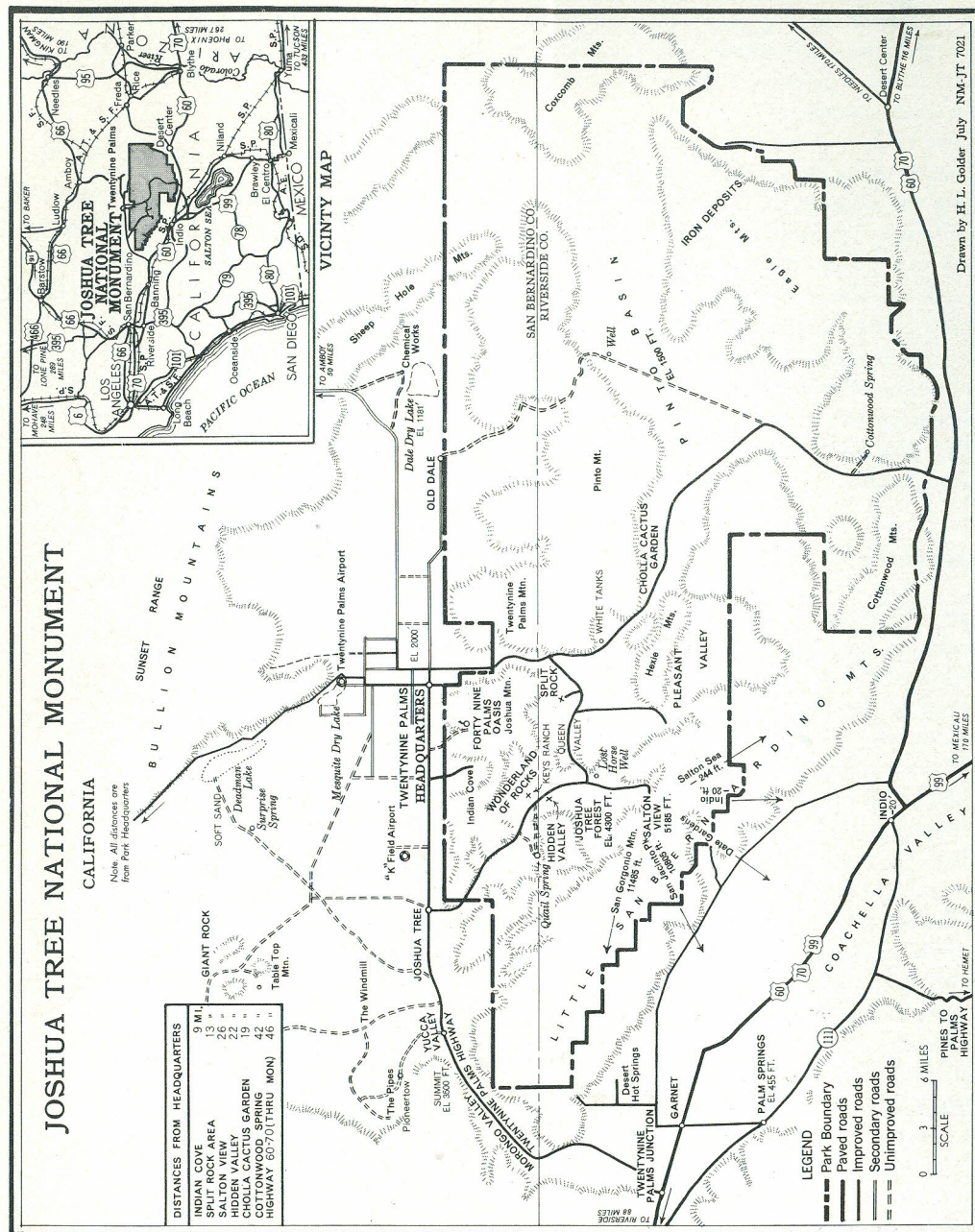
LOCATED in southern California, in Riverside and San Bernardino Counties, the monument is less than 150 miles from Los Angeles, and is best approached on U. S. Highways 60, 70, and 99 to a point 15 miles east of Banning, thence to Twentynine Palms and the main entrance.

From U. S. Highway 66 motorists can go direct to the monument by turning south at Amboy. The distance to Twentynine Palms is 50 miles, over a sandy desert road.

Main roads in the monument are of a good desert type. Visitors are cautioned to stay on the regular designated routes of travel and, especially during the hot summer months, water should be carried.

The monument is a sanctuary for all wildlife, and hunting is prohibited. No plant life, other natural features, or artifacts may be gathered, cut, destroyed, or removed from the monument.

Inquiries and communications should be addressed to the Custodian, Joshua Tree National Monument, Twentynine Palms, Calif.



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