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A HISTORY OF JOSHUA TREE NATIONAL MONUMENT

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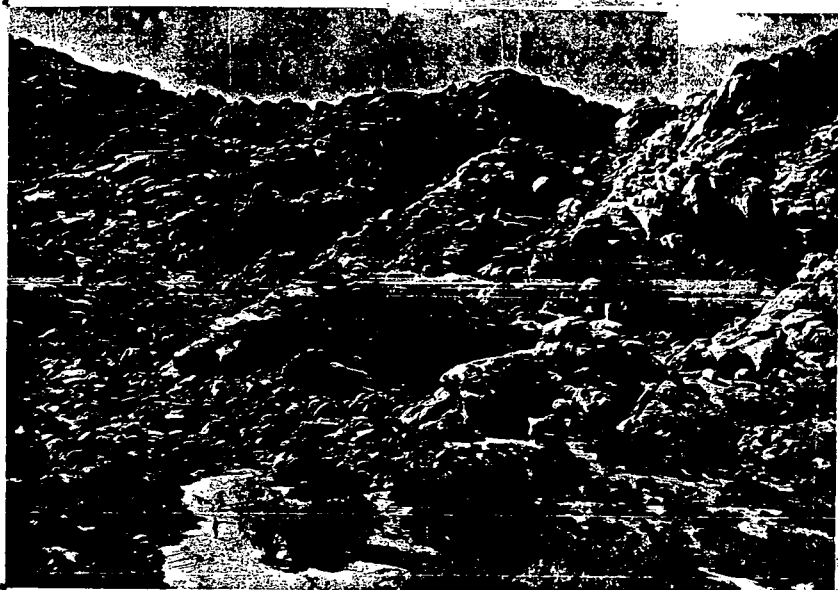
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by Samuel King
[1954]
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A HISTORY OF JOSEPH TEE NATIONAL MONUMENT



Indian Cove area, Joshua Tree National Monument
(History)



Looking across a portion of Pinto Basin from the Black Mountains, Old Dale Road in foreground.

Joshua Tree National Monument
(History)



The Old Adobe was built at the Oasis in 1890 by a Mr. Aldridge of Santa Ana, California; with Billy Heaven and Jack Hunkins doing the work. It stood until 1949 when it was razed as it constituted a hazard.

Joshua Tree National Monument
(History)



Sa. ton View - Elevation 5125 feet.

Since much of this article, particularly in its first part, is composed of verbatim quotations from "A Handbook of the Joshua Tree National Monument" by W. Egbert Schenck and Frank R. Givens, and since other facts from the Handbook have been extensively used, appreciation is hereby acknowledged for their contribution.

A HISTORY OF JOSHUA TREE NATIONAL MONUMENT

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A HISTORY OF JOSHUA TREE NATIONAL MONUMENTGEOGRAPHICAL SETTING

Joshua Tree National Monument is located in south central California just north of 34° and is west of the 115th meridian. The area forms an ecctone or transition zone between California's two great deserts, the Colorado and the Mohave.

In "A Handbook of the Joshua Tree National Monument", W. Egbert Schenck and Frank E. Givens describe the topography of the Monument as follows:

"The LITTLE SAN BERNARDINO RANGE starts in the northwest corner of the Monument and a spur extends southeast for 30 miles. The COTTONWOOD RANGE is in the southwest corner of the Monument. The EAGLE RANGE stretches along the southern boundary east from the Cottonwood Range almost to the Coxcomb Range. Another spur of the Little San Bernardino extends east from the northwest corner. The DESERT QUEEN MOUNTAINS are a part of this spur southeast of Twentynine Palms. The PINTO MOUNTAIN RANGE parallels the east half of the north boundary. The COXCOMB MOUNTAIN RANGE mostly inside the Monument, makes the east boundary. The HEKIE MOUNTAINS are in the center of the Monument." 1/

After making an extensive geological survey of the area in 1954, John Rogers of Fide Institute had this to say:

"The rocks of Joshua Tree National Monument provide an ideal opportunity for the professional geologist to study processes which have occurred at depths perhaps as great as 20 miles below the surface of the earth. These rocks afford a rare chance for man to learn something of the interior of this planet." 2/

The mountain ranges within the Monument are of old rock but are recently formed. It is probable that at least part of the area was once covered with fresh-water lake deposits of the Miocene era. However, as molten masses of rock pushed up from below they often lifted the original surface far above where it had been, breaking and cracking it in the process. For this reason, the original surface was more vulnerable to erosion so that in places it has disappeared entirely. Hundreds of light to pinkish-grey rock formations are scattered over a large portion of the Monument, stamping it with a beauty of its own.

Transcontinental highways U.S. 60, 70, and 99 skirt the Monument on the south, making the area accessible to all of Southern California and the country at large.

The Southern Pacific Railroad passes through Indio, Palm Springs, and Banning to the south of the Monument. These cities are all within two hours drive from the Headquarters Building at Twentynine Palms.

No airline or waterway facilities are available near the area, although a transcontinental air route passes over the southern portion of the Monument.

The most important population center near the Monument is Los Angeles and environs. Also of importance are such large communities

as San Diego, Ontario, Pomona, Riverside, and San Bernardino. Communities adjacent to the area are relatively small; the most important being Twentynine Palms, Indio, Palm Springs, and Fanning.

The bulk of the population is Anglo-American with the usual mixture of races in metropolitan districts. Comparatively large numbers of Spanish-Americans reside in the area immediately south of the area.

The population in the Los Angeles area engages in the usual commercial types of work. The people to the west and south are principally agrarian. To the south and east is the great agricultural region of the Imperial Valley.

One of the primary reasons for the steadily increasing popularity of the Joshua Tree National Monument was set down by its first Superintendent, James E. Cole, in one of his early reports:

"The people of Southern California are noted as travelers and due to favorable climatic conditions, outdoor activities probably rank first in recreational pursuits. Extended week-end motor trips are the rule rather than the exception. In the Los Angeles area auto ownership per capita ranks with the leading cities of the world and is undoubtedly the highest in the Western United States." 3/

With the inception of the Marine Corps Training Center at Twentynine Palms in 1953, the use of the Monument for outdoor activities has increased greatly.

PREHISTORIC STUDY OF THE AREAPinto Man

(From A Handbook of the Joshua Tree National Monument)

"Man's story in the Monument begins with a mystery tale of 'far away and long ago'. It is based on odds and ends which pre-historic men left behind. These are faint clues which may be variously interpreted; and the version which will not disappoint the imagination of the layman may not sustain the approval of the archeologist.

"In the southeast corner of Pinto Basin, in 1935, Mr. and Mrs. William F. Campbell noted three important facts; (1) scattered about were flint points, bits of pottery, parts of metates, etc.; (2) the topographical features suggested that a lake had once filled this part of the basin; (3) in the clay beds there were fossilized bones of extinct animals such as primitive camels and horses. If these artifacts were directly related to the shoreline of this lake, then the lake and the men who left the artifacts must have been contemporaneous. Geological opinion was that the lake was of the Pleistocene era. Thus Pinto Man would have lived there probably 15,000 to 20,000 years ago. Further, if the artifacts could be positively associated with the fossilized bones, Pinto Man might well be even older than 20,000 years.

"For several seasons, the Campbells worked on these theories

with the aid of technical experts. They checked the possibilities by collecting in other places and examining the shore-lines of other Pleistocene lakes in Southern California. In the end, neither correlation could be absolutely established, although neither could be definitely ruled out. Subsequently, specialists of the Southwest Museum of Los Angeles developed the Campbell theories. Notably, they amplified the possibilities of the Pinto type of projectile point to which the Campbells had called attention. This is a distinctively shaped, crude, flint point found on the Pinto site. It has a basic resemblance to the famous Folsom Point found in Colorado and elsewhere in the western high plains in direct association with the bones of an extinct type of bison. This resemblance and the crudity, the Campbells suggested, must indicate great antiquity.

"This theory and Pinto points and Pinto culture have found acceptance among some archeologists. Such a culture is deemed to have been so primitive that pottery was unknown as were bows and arrows. The Pinto point is supposed to have tipped a dart hurled by means of an atlatl or throwing stick. And these darts were hurled by very primitive men living on the shores of a fresh-water lake in a country amply able to sustain life with seed and game.

"The time at which some such people may have lived in Pinto Basin may be subject to adjustment, as may be the

exact nature of their culture, for other archeologists, including those of the Anthropology Department of the University of California at Berkeley, find objections to the acceptance of the above version. (a) There are not enough artifacts to account for the very long-time residence on the site which the theory demands. Rather a short-time camp is suggested by the scant amount of material. (b) Type and Time cannot be taken as synonymous; that is, an artifact is not old because it is crude or has a certain type of crudity. Selection can divide Pinto artifacts into the 'crude' and the 'fine'; but such selection was not made by pre-history but must be made by modern students. Crudity can result from many causes -- inexperience, haste, or intractable material, for example. Moreover at the Pinto site good points are found on the same surface as the crude ones. (c) A 'pre-pottery' culture is usually taken to mean a paleolithic culture. A 'non-pottery' culture is by no means the same thing. A lack of pottery need not indicate antiquity. For example, the Apaches, with no pottery, appeared many centuries after peoples of the Southwest who were skillful potters. If it be claimed that the Pinto site was without pottery, the conclusion that it was paleolithic need not follow. Pinto culture was also without pottery.

"(d) A radio-carbon test devised by atomic research workers has greatly reduced pre-historic ages reasoned out

by other methods. This Carbon 14 test cannot be applied to the lithic materials of the Pinto site, but the general pre-historic age reductions make the early estimates of Pinto Man's age unreasonable. This in turn makes the associated Pinto Lake too young to be a Pleistocene lake and takes away the climate and conditions favorable to Man's residence on the site.

"Are there other sites in the Monument of the Pinto Man type? None have been found, but research has been too limited to make this answer conclusive. It is possible for example, that the site at Copper Mountain, just outside the northern boundary, is the Pinto Type." 1/

ANCESTRAL HISTORY OF THE AREA

(From A Handbook of the Joshua Tree National Monument)

Chemehuevis

"The age of Pinto Man and the details of his culture are the means by which specialists would relate him to other men of other places. However, too little is known of the adjoining areas in his presumed era to permit helpful statements here. Our first story postulates that Pinto Man did not know pottery. Since pot-sherds are found at the site, we must presume that the postulate is in error, or that while on the site Pinto Man acquired the knowledge of pottery, or that he was replaced by another Early People who knew pottery. The last assumption is the least controversial. If the totality of Pinto site archeology be assigned to this Early People, rather than only part of it being assigned to Pinto Man, it then appears probable that these Early People were related to the Chemehuevi Indians, or were the ancestral Chemehuevis. The name Chemehuevis is used because this group of Indians were living along the Colorado River only some fifty miles east of Pinto Basin when Lieutenant A.W. Whipple was there in 1853. And from the same region Lieutenant J.C. Ives, in 1857, reported them as a wandering race which traveled great distances. Since they were blocked to the south, east and north by the Yumas, Yavapai and Mohaves respectively, it seems highly probable, aside from archeological

evidence, that they ranged in Pinto Basin. How long prior to 1800 they may have been doing this cannot be stated.

Serrano

"Looking to the Western part of the Monument in this same dim light before history's dawn, a different group of Indians, which may be called the ancestral Serrano, is discerned. Again, it cannot be said how long they were in the region. When W.H. (Bill) McHaney arrived at Twentynine Palms Oasis in 1879, Serrano Indians were living there. Dr. William Duncan Strong has determined from Indian sources that these were of the Wildcat and Coyote clans, but that their atoriginal social organization had been well broken down. The ancestral home of the Serrano was in the San Bernardino Mountains, and their cultural affiliations were with the West rather than with the Chemeheuis. Thus, the western part of the Monument was probably the hunting ground if not the home, of a group different from those in Pinto Basin. These western people left pictographs, bed-rock mortars, pot-sherds, trails, camp-sites, and other evidence of their presence. At Coyote Holes a recent living site is strongly suggested.

Piutes

"The Piute story in the Monument would belong to history were it not for the lack of regional records. In 1888 McHaney saw Piutes arrive to mix with the Serrano already at the Oasis. But it seems highly probable that this was not the first visit of the Piutes. Lieutenant Ord reported them

in Cajon Pass forty years before. They were noted as horse thieves about the same time and would have had to have waterholes where the stolen horses could be hidden. And the existence of a trail probably even earlier from the Providence Mountains to the Oasis strongly suggests a Piute travel route. At any rate, these Indians, displaced by white pressure in the north, were no longer true aborigines having taken on many white customs and equipment. Yet they retained enough of the aboriginal to confuse the Indian evidence left in the Monument. For example, some of the pictographs are almost certainly Piute, as may be the wooden bow, etc. It is these Piutes that were the Indians best known to the early whites coming to the Monument.

"There were about forty Indians at the Oasis in McHaley's time; and 50-60 graves in the cemetery nearby. His story of them told in 1933 is this: They were friendly and uninspiring. They lived on mountain sheep, rabbits, mesquite beans and seed. They sold sheep to travelers, and in hunting them had discovered many of the old mines. Among those whom Bill knew were the following: Old Piute Jim Boniface, who is buried locally; Captain Jim Pine, who made the first local collection of 'Indian relics'; Jim Waterman, who, exasperated by his father's death, killed the attending shaman (medicine man), and the shaman's wife, horse and dog and burned his house; Captain Pacheco, the best liked of the local Indians, whose son Joe married

Fiute Jim's eldest daughter, Annie, and was the last Indian to leave the Oasis; Old Shepeven, who was over 100 years old; and finally, Willy Foy, who shot Indian Mike Boniface (Jim's brother) to death when Mike refused to give his sixteen year old daughter ('Not beautiful but big and fat,' said McHaney) to him in marriage, and who subsequently was an historic figure because he was hunted down over the desert by a white posse." 1/

THE COMING OF THE WHITE MAN

(From A Handbook of Joshua Tree National Monument)

The early story of the Joshua Tree National Monument region that can be founded on written words is brief; and the events are of little apparent importance. No record of a traverse of it by the pathfinders has been found. Father Garces (1776), Fremont (1844), and Jedediah Smith (1826) tell of trails 100 miles to the north along the Mohave River. DeAnza (1770s), Emery (1846), Cooke (1847), Whipple (1849) were far to the south in Imperial Valley. Blake (1853) Williamson (1853) recorded details of Coachella Valley. Not until 1855 do we have a written word concerning our region. Then it is a most exasperating one. The map recording Col. Henry Washington's Land Office survey of that year shows a road leading east from the Twentynine Palms Oasis. It is labeled: 'Old road to the Providence Mountains'. Who made this road? Was it a horse trail? Or a route where wheeled-vehicles had been? One can only speculate. Perhaps the trappers of the 1820s came this way. Or maybe the horse-traders of the 1830s started their horses towards Santa Fe along this route. Or some of the boys of the Mormon Battalion may have headed home along this road in the 1840s. Probably before and certainly after, any of these, the Piute Indians came down thus from their Nevada ranges. Perhaps in time more exhaustive research than we have been able to undertake will answer these questions.

"Even when we pass beyond this era of pure speculation, we can establish at best only a story with highlights and little importance. It is devoid of misadventures like the Donner incident and the Manly party. There were no bonanza camps. There weren't even fictional heroines like Fannona. On the whole we are dealing with a group of men who knew how to take care of themselves and did. This is a major accomplishment; but one that makes for happiness and not for history. Yet it seems due to the future that a booklet like this should recall a few names, and set down a few events.

"Our first written word is brief indeed. On June 29, 1855, Col. Henry Washington made this entry in his notes: 'From this corner an Indian Wigwam (near a spring of good water, supposed to be permanent) bears N 51° E, and a small cluster of Cabbage Palmettos bears N 27° W.'" Such is our first view of the Twentynine Palms Oasis. In 1866 A.P. Green's surveying party ran the interior lines for Washington's township corners.

"About this same oasis, Green recorded this: 'There are some 26 fine, large Palm trees in Sec. 33 from which the Springs take their name "Palm Springs". There are a few Indian huts in Sec. 33, etc.' On the map accompanying these surveys is shown a 'Road to the Palm Springs' (i.e. to the Oasis from the west), as well as the road to the Providence Mountains above mentioned.

"Some of the implications of Green's words may be mentioned.

(1) He speaks of 26, not 20, palm trees. (2) The place had a name in English which indicates that people whom we cannot now discern were familiar with the region. (3) The 1856 name of Palm Springs persisted until well into the 1880s being so designated on a county map of that period. However, the name Twentynine Palms was in common enough use by 1872 to be used in describing a mining claim by McKenzie and Germain. This McKenzie was witness to the sale of a nearby mine in 1861. In these early days, the now famous Palm Springs in Riverside County was known as Agua Caliente.

1860s - 1870s. During these two decades unknown men continued to acquire unrecorded knowledge of the region. Many of these men were not Americans. At that time there were booming gold camps in the San Bernardino Mountains, along the Colorado River (as at La Paz), and further east in Arizona. Indians of various tribes, Mexicans and Chinese worked in these camps and traversed the roads to them. Much trucking to the eastern camps went from the Coachella Valley via Dos Palmas to Ehrenburg (i.e. via the Bradshaw Trail). At times the teamsters returned by more northerly routes. For example, 'Chuck' Farren, of Warrens Well in Yucca Valley, once returned via Clark's Pass and Twentynine Palms Oasis where he found no Indians living. At another time he returned as far north as Kelso where he found his future wife and family stranded in the sand dunes. The information gained in such traverse led to the

filing of land and mining claims. A few typical claims are listed below. First it may be well to explain that in this era, and in our account, all 'mines' are gold mines.

"In 1865, M. Brown filed on the 'Jeff Davis' claim in Fattle-snake Canyon, then known as Lone Valley and now confused with Indian Cove. This is the earliest claim we have located in the Monument. A guess might be made as to why the owner of a 'Jeff Davis' mine was in so remote a spot. An old Mexican type smelter was in this same area in 1870. And J. W. Wilson had a claim there in 1873.

"In 1870, there existed a Cottonwood Station for truckers at Cottonwood Spring. This unusually good water supply must have been a focal point of the region. Indian trails, mine workings, a long pipe line, an adobe house long gone (in 1952) all confirm a relatively great interest and activity. Unfortunately we have no record whatsoever.

"In 1889, 'The Lelia Pale' claim was a relocation on the 'Santo Domingo de Lopez'. The date of the original location and the Spanish names involved seem significant.

"On March 17, 1873, J. Eoshay (sic) filed on the Twentynine Palms Oasis as a homestead. This French-Canadian (?) name is suggestive both with reference to the early trappers (the father might well have come south with them), and to the existence of Foshay Spring in the Providence Mountains.

"1860s - 1890s. In 1879 our direct knowledge begins with the arrival at the Oasis of William H. McManey from Davis

County, Missouri. He came with cattle up the Santa Ana River, down Mission Creek, and on to Twentynine Palms Oasis. Thereafter, he lived in or near the Monument for 58 years, and died in 1937 at the ranch of Bill Keys who himself first came to the region in the Fall of 1910. McHaney did enough work for others to support his mining ventures. Part of the time he lived at the Oasis, or as he called it 'the Palms'. Part of the time he lived in a most unusual edifice he called a wickiup in upper Musick Valley. Here on a May day in 1933 Mr. Walter E. Ketchum and the present writer took down a rather exhaustive account of Bill's life. This story checks reasonably well with the data acquired from other sources and as corrected furnishes the thread upon which to string some early names and events.

"In the 1880s, Lou Curtis (who first discovered placer mines near Old Dale on Dale Dry Lake, first known as Furts Dry Lake), C. A. Pinkham (who had many claims in the Monument), Alfred G. Tingham (Southern Pacific Railway Agent at Indio with mining fever), Ed Holland, and others began to interest themselves in claims within the present Monument boundaries. So did Jonathan (Dirtyshirt or Hardrock) Wilson, one of the most vivid and energetic of the old timers. In 1883, he came to live in Wilson's Cove (or Cave or both) which is the present headquarters section of the Joshua Tree National Monument at the Oasis. He also gave his name to the Wilson Mountains, now the Pintos, and to Wilson Wash --the big wash below Stirrup Tank. Billy Heaves built the Old Adobe at the

Oasis in 1888. This served as a store and station for the truckers to the Dale region. It was long a landmark; and was the first house near the Oasis. Neaves also planted the fig tree, the large willow and the cottonwoods in Wilson Cove. The willow came out from Covington's Fanch as a teamsters whip. The Serrano Indians planted the trees near the present Twentynine Palms Inn.

McHaney by direct assertion and Washington and Green by inference indicate that only mesquite and palm trees were pre-white at the Oasis. In 1896, Neaves was responsible for another first. With John Thurston, he built a rock house near the Cove which later became the first school-house of the region. In 1897, John Lang (whose grave is on the road to Salton View) started, near the rock house, the first saloon. And at Sneak-eye Spring at the west end of Indian Cove a still was operated by John Stull, a lame man.

In the 1890s, a few of the many claims became small-scale mines. Dutch Frank Diebold filed on the Lost Horse in 1893; Jim McHaney on the Desert Queen in 1894. Tingman and Holland operated the Homestake and Dewey in the Piñon Mountains using water from Piñon Well (originally a spring). This region -- Piñon Mountains, Pleasant Valley, Fargo Canyon, Berdoo Canyon -- saw a considerable proportion of the activity of this time and a little later.

Coincident with this interest in gold was an interest in pasturage. Owners ranged their cattle further and further

into the desert. Possibly because it took so many acres to support one 'cow', such business was early monopolized by a few large cattlemen; namely Cram, who operated from the Hayfields in the Cottonwood Spring area; Talmadge Bros. and Barker and Shay, who operated out of Whitewater Ranch on Highway 99. The cattlemen dug wells, built dams and improved springs. Time has wrecked some of these, as at Ivanpah Tank, Liveoak Tank, Squaw Tank, Pattlesnake Tank. Others are good Monument watering places: Parker's Dam, Willow Holes, Stubby Spring, White Tanks.

" 1900s - 1910s. Mining was now at its peak in the Dale District and to a lesser degree in the Marble Mountains and Pleasant Valley. The size of the operations is attested by the census figures for Dale Township, the scene of the greatest activity: 1900, population 60; 1910, 120; 1920, 1. There was Sam Joyner who had once been a bar-tender in Dale. March 10, 1903 Maria Eleanor Whelan died at the Oasis while enroute to Eaton's Camp where her mother worked. (Eaton's Camp was near the 1952 Iron Age Mine south of Dale). Here is the grave seen at the Oasis.

"1920s - 1930s. During the 1920s many veterans, and their friends, began to homestead in the area just north of the Monument. The story of the activities in the Monument becomes blended and lost in the current history of this larger community.

"In the 1930s there was a flurry of mining activity in

the Monument due to the depression of those years. No mine resulted that has continued to operate.

"1936. Joshua Tree National Monument was established on August 10 by Presidential Proclamation. It was not until 1940 that funds were available for the establishment of an office and administrative personnel in Twentynine Palms." 1/

CREATION AND ADMINISTRATION

(From the Handbook of Joshua Tree National Monument)

"Among the homesteaders of the 1920s and their friends and visitors were many who quickly perceived the unusual character of this region. Discussions and plans for the protection of the area resulted. This interest and agitation produced the passage of bills by both houses of the California Legislature creating a State Park. This was never signed by the then Governor James E. Fulp, Jr. largely because Mrs. A. Sherman Hoyt intervened with the plea that time be given for the Federal Government to act in establishing a national monument.

"Mrs. Hoyt was passionately fond of the region; and her vigorous advocacy of its protection was a major factor in the creation of the Monument. She devoted time and thought and money to the project. She kept interest alive and secured the assistance of able and influential people. She inspired the production of descriptive articles (notably one on botanical resources by Dr. P. A. Munz). She got together albums of pictures and exhibits. With all this she demonstrated to proper authorities the desirability of preserving this remarkably characteristic desert region for the enlightenment and enjoyment of generations.

"As our historical chapter has indicated, the area is of no historical importance. However it was recognized in Washington, as it has been in Trentynine Palms, that as a scientific exhibit

it was outstanding and that aesthetically it offered a wide variety of unique natural features. Time has endorsed this recognition. The influx of population into the desert has emphasized the need for protection. And the scenic attractions have enjoyed a tremendous increase in popularity with each passing year. No one could have predicted in 1930 this great increase in popularity and population. It is hoped that this unpredictableness will guide the Public and the Park in the future.

"The end result of all these efforts was an Executive Order by the President dated October 25, 1933 withdrawing from entry approximately 1,136,000 acres of Federal Land in Riverside and San Bernardino counties, California. Then on August 10, 1936 a Presidential Proclamation established a Joshua Tree National Monument of 838,256 acres. On September 25, 1950 Congress revised the boundaries of the Monument so that in 1952 it comprised a gross acreage of 557,934." 1/

BOUNDARY CHANGES

With passage of the Phillips Bill in 1950 some 289,000 acres were deleted from the Monument and returned to the public domain. These were the areas where it was thought that minerals in commercial quantities might be developed. Subsequent activity in the deleted portions has not disclosed any substantial yield of precious metals. Some idea of the relative value of the minerals taken and potential may be gained from the following reports:

PORTIONS OF MINERAL REPORT

by

Edward N. MacKinnett, Geological Survey

Edward J. Matsch, Bureau of Mines

Mineral Production and Mining Activities

*Production records in the San Francisco office of the Economics and Statistics Division of the U.S. Bureau of Mines and the 25th and 41st Reports of the California State Mineralogist show that the principal products mined have been gold and silver. The combined gold and silver amounted to about 16,000 ounces estimated as 23 percent silver and 77 percent gold, total value about \$434,200.00, based on current prices quoted as follows in the 'Engineering and Mining Journal' for November 1950: gold \$35.00 per ounce and silver, 80 cents per ounce. In addition one of the gold mines also produced 33,800 pounds of lead valued at \$5,746.00 based on the current price of 17 cents per pound. The mines which produced the above metals

that are within the present boundary of the National Monument ceased production between 1896 and 1938, with the exception of one mine which had a production record of 500 ounces of gold and 66 ounces of silver up to 1942.

"With one exception, all mines and prospects visited in December, 1950 were idle; none within the revised boundaries is known to have been active since the the start of World War II, and many have not been worked since the late '90's.

"The one exception was Mymine operated by a lone prospector, Dr. F. Smith, in Sec 35 (?), T. 1S., R. 9E., San Bernardino Base Line. At this location an 11 foot shaft has been excavated, and work is being continued in an endeavor to find a hidden gold deposit. However, no vein or other indication of ore is exposed in the workings.

"Examination showed that most of the mining was done from vertical or inclined shafts, and the long period of idleness has left these in bad condition. Machinery and other useable surface equipment has been rather completely stripped and taken away. Rehabilitation of the mines, which would be costly, would be necessary before new operations could start; even to prospect for new ore in old mines would be costly.

"Two concentrating plants about 1 mile apart were noted within the present limits of the National Monument. One, which is to use cyanide methods for recovery of gold, was under construction; when completed it will be able to treat about 60 tons of ore per day. The operators also expect to

install some flotation units and increase the capacity to about 100 tons per day.

"The other plant is equipped for flotation and is capable of treating 25 tons per day.

"For both plants the ore will come from mines outside the National Monument boundaries.

Ore Reserves

"No definite estimates of reserves can be given because to gain this information would require many months of detailed examinations. The fact that the mines closed long before restrictions adverse to gold mining (War Production Board Limitation Order L-208, October 8, 1942) indicates strongly that their ore zones were depleted.

General Appraisal

"In general terms, the outlook for mineral production from the area within the Monument is as follows:

"Gold and silver. -- The gold-silver ore deposits mainly quartzveins, commonly within shattered, sheared, and brecciated fault zones that attain 30 feet in width. The quartz veins range from a few inches to 2 or 3 feet in width, mainly strike within 25 degrees of north, and dip steeply. Minor amounts of hematite, limonite, pyrite, chalcocite, oxidized copper minerals, calcite, and barite are present in some of the veins. It is extremely doubtful if any of the gold-silver deposits within the Monument can be profitably mined.

"Lead. -- No lead minerals were noted during the present survey; however, lead has been mined as an accessory metal in one of the Gold-silver mines.

"Iron. -- Small, iron-rich segregations, mostly of magnetite, are found in the intrusive rocks at a few places, and minor quantities of iron-bearing minerals occur in some of the quartz veins, but all of these lack commercial possibilities.

"Quartz. -- Minor amounts of quartz have been mined at one locality (west of Cottonwood Pass), ostensibly for the manufacture of silica glass.

"Vermiculite. -- A 'vermiculite' deposit in the western part of the area appears to consist largely of biclomite and, consequently, is not of commercial importance.

Geology of the Area

"The geology of Joshua Tree National Monument is fairly simple, and the rocks of the area form good exposures. With the exception of alluvium, which covers about one-third of the Monument, the area is a crystalline rock domain, practically devoid of possibilities of petroleum production. In all likelihood the alluviated areas are underlain by crystalline rocks similar to those exposed.

"The climate of the region is semi-arid, and the vegetation consists mainly of chaparral, several varieties of cactus, yucca, and Joshua Trees. Access to the area is provided mainly by oiled roads and improved dirt roads, the majority of which are maintained by the Park Service.

"The most abundant and oldest known rock type in the region is an igneous-metamorphic complex that is composed of a few highly metamorphosed sediments which were first intruded by gabbroic or dioritic magma and later by granitic magma. This unit makes up about 40 percent of the exposed rock and is probably pre-Cambrian in age. The Mesozoic (?) White Tanks quartz monzonite constitutes about 25 percent of the outcrop area within the Monument.

"Granite, quartz diorite, porphyritic monzonite, and gabbro make up about 20 percent of the outcrops. Metavolcanics and meta-sediments of the Mesozoic (?) McCoy Mountain formation occur in the southern part of the Coxcomb Mountains. Two olivine basalt flows of probable Tertiary Age lie within the Monument, and Pleistocene (?) lake beds underlie part of Pinto Basin. Fine-grained Tertiary dikes, both acidic and basic, have a small distribution. Pegmatitic and aplitic dikes are associated with most of the previously mentioned intrusive rocks.

"Possibly thorough prospecting would reveal small amounts of radioactive minerals in some of the pegmatites; however, it is highly improbable that commercial quantities of uranium or thorium exist in this area.

"No tactite-bearing roof pendants, such as might be favorable for the occurrence of contact-metamorphic scheelite or iron deposits, are known to exist within the Monument.

"Faults are common and probably control the trend of many

of the mountains. Many of the granitic rocks weather to picturesque and unique forms that enhance the scenery. W

ADMINISTRATION

Headquarters for Joshua Tree National Monument was established in Twentynine Palms on September 19, 1940.

Local support for the establishment of the Monument was good for the most part, minor complaints were heard regarding the prohibition against the removal of wood from the Monument for fuel. Another source of complaint on the part of a small group was the rule prohibiting mining and prospecting on Monument lands.

Superintendent Cole accomplished much in reconciling these conflicting interests during his administration as superintendent by pointing out the larger values inherent in the Monument which were of broad national interest and continuing in character.

Superintendent Cole continued as administrative officer until October 30, 1942, when he volunteered for service with the United States Army during World War II. He was replaced by Mr. Walter G. Atwell who served until December 8, 1942, when he was replaced by Duane Jacobs who served as Acting Superintendent until December 2, 1943, when he was called to service with the United States Navy. Mr. Walter E. Ketchum succeeded Mr. Jacobs as Acting Superintendent until he was relieved by Frank Givens who served as Superintendent until March 5, 1944. Mr. Givens was replaced by Mr. Cole on May 6, 1944 on the latter's return from military service. Mr. Cole served as superintendent until March 4, 1947, when he was promoted to the

position of Biologist in Region Three; Mr. Frank Givens succeeded Mr. Cole and served as Superintendent until he was promoted to the superintendency of Acadia National Park. Mr. Givens was succeeded by Samuel King, who presently occupies the position of administrative officer.

First Ranger

The first Park Ranger appointed was Harold S. Hildreth who served from January 20, 1941 to July 19, 1941, when he resigned.

Next came John F. Stratton who served as Clerk-Ranger from October 1, 1941 to March 12, 1942, when he was recalled to active duty as a 2nd Lieutenant in the U.S. Army. He returned after the war to serve from May 9, 1946 to November 11, 1948 in the same capacity.

Emmel L. Farenfight succeeded Mr. Stratton on April 1, 1942 and served until August 13, 1942 when he was called to the colors. Walter E. Ketchum replaced Mr. Farenfight as Clerk-Ranger and served from October 5, 1942 to August 4, 1945, when the latter returned from military service on August 6, 1945. Ranger Farenfight was subsequently promoted to the position of Supervisory Ranger which position he holds today.

The personnel roster in the appendix shows all personnel who have served in various capacities from inception of active administration to date.

Foods and Trails

The development of the road system was initiated early in 1941 with the appointment of Robert S. Lake as Grader-Operator. Field engineering for the new roads was furnished by Engineers

Theodore Goodwin (later superintendent of Death Valley) and Walter Atwell whose alignment selections for the various routes have proven to be properly located from the standpoint of public use and maintenance. The program thus initiated has progressed with remarkable results through the years, culminating in a road system comprising some 91.43 miles of primary and secondary roads. Of this total approximately 68 miles have been given a dust palliative surface and the balance is gravel. A rather remarkable achievement since to date this has been accomplished with maintenance funds with the exception of \$10,000 allotted to repair flood damage in 1941.

Public Use

Consistent with the road development has been the ever increasing use of the Monument by the public as indicated by the travel figures. Starting with some 27,364 visitors in 1941, substantial increases have been reflected nearly every year, with an all-time record of over 250,000 in 1954.

The list of visitors to the monument would include many famous names as well as just interested men and women; many scientific students as well as laymen. As no records were maintained in the earlier days, it is not possible to list those names that would be meaningful to present readers.

FLORA AND FAUNABotany

(From A Handbook of Joshua Tree National Monument)

"Over 550 species of native plants have been identified from Joshua Tree National Monument. Of these, 60 are rarely found in California except in the Monument of the nearby area. No equal area of our western deserts has a richer representation of families, or species, or produce finer individual examples of those relatively rare plants. The flora is typical of an extremely arid country. Two life zones are represented. The Lower Sonoran, ranging from 0 to 3,000 feet altitude contains such plants as mesquite, encelia, and ghost flowers. In the Upper Sonoran Zone, 3,000 to 5,000 feet, are found pinon pines, blackbrush, and Mohave Desert Star. Further, the Monument is a transition area between the Colorado Desert and the Mohave Desert so that plants characteristic of each desert are present. For example: ocotillo, border palo verde, and frost-mat belong to the Colorado Desert, while Joshua Tree, Cheesebush and desert mariposa are typical of the Mohave." 1/

As previously mentioned, the area is one of interest, especially to such scientists as Dr. Philip A. Munz and Dr. Edmund Jaeger. These men and others did much to collect, identify, and

classify the plants of Joshua Tree National Monument. Mrs. Sara W. Schenck collected much data and made one of the earliest and most extensive collections of the flora of the region.

It was Superintendent James Cole who started the first herbarium for the headquarters of Joshua Tree National Monument. This excellent collection is still being used by Monument personnel.

Ranger Charles F. Adams Jr. first compiled a master check list of flowering plants of Joshua Tree National Monument. *

Wildlife

(From A Handbook of Joshua Tree National Monument)

"F. E. Johnson (subsequently famous as 'Pussyfoot Johnson') was Indian Agent for a region which included part of Twentynine Palms Oasis. About 1909 driving across Fried Liver Wash in Pinto Basin with an Indian, they jumped a jack rabbit. When Johnson reached for his gun, the Indian put out a restraining hand and asked, 'Why?'. In relating this, Johnson added, 'I laid aside my rifle then and many times later was ashamed of such a silly impulse.'

"The Monument has more animals to 'not-kill' but to enjoy than a newcomer might suspect. Early white explorers, remembering their greener lands, reported the desert as the home of only rattlesnakes and noxious reptiles. This reputation has been as enduring as it is false. The per square mile population of animals in the desert is indeed less than in areas of greater rainfall; but there is a definite population both as regards species and

* This project is in final stage of completion.

individuals.

"How can animals live in a land of little food and no apparent water? Part of the explanation lies in the fact that some animals eat others; and that nearly all plants are food for something. Given suitable rains, the plant-eating animals increase; and the following year the carnivorous animals prosper. Thus the key to the animal population is the condition of the flora. Of this flora only a few species are avoided by animals. Some of the most forbidding plants are eaten. For example, certain pack-rats depend on cholla cacti; rabbits eat creosote; deer browse on yucca.

"However, water is the determining factor. There is generally enough food present to support a larger population than the supply of available water permits. The ability of desert animals to get along on the water available is dependent on several factors not readily perceived. (1) More water is actually present than is apparent. Aside from known springs there are hidden tanks and remote seeps. Also there are pools on the tops of rocks that contain water for a month or so after rains. And, at places in stream beds, underground water exists. Holes, made by coyotes in digging for such water, are frequently observed. (2) Desert animals require less water. Their habits of life conserve their bodily water; i.e. they spend much of their time underground, or out of the sun, and are most active in the coldest hours--not unlike some experienced human dwellers of the desert. (3) Certain animals get water

from eating succulent plants. (4) Other animals obtain needed water through metabolic processes; i.e. through chemical reactions in digestion. Kangaroo rats can live indefinitely with no water and only dry seed for food.

"All mammals of the Monument are shy and wild and natural. Therefore, quietness, patience, perseverance and some luck, are required in meeting them. Fomentar, the right place and the right time depend upon the habits of the animals and not those of the visitor. 1/

PHYSICAL IMPROVEMENTS

Campground facilities were gradually expanded over the years until a total of seven were established at suitable places in the Monument. These are all equipped with concrete tables and fireplaces. Pit type latrines with open tops were installed throughout the various campgrounds. One area at Sheep Pass has been designated as a "group camp" to accommodate the large organizations.

Probably the greatest single problem confronting the Service through the years has been the matter of acquisition of private lands within the exterior boundaries of the Monument. Much has been accomplished in acquiring private lands until at this writing some 80,000 acres remain in private ownership, as compared to an original total of approximately 265,000 acres. This has been achieved through the combined efforts of the field personnel and the Regional and Washington Offices.

A substantial amount of tax-deeded lands in Pinto Basin will probably be acquired through condemnation proceedings and reimbursement to the State of California in 1955. It is hoped however that Congress will one day appropriate sufficient funds so that the remaining private lands may be acquired by purchase.

In 1950 some 289,000 acres of lands were deleted from the Monument under the Phillips Bill H.R. 4116 and returned to the public domain. These deleted lands were alleged to contain large deposits of valuable minerals. Subsequent activities in the deleted lands do not substantiate this contention, as only two claims have been filed up to 1954.

Another important land transaction transpired in 1950 when the National Park Service acquired 58 acres of land including the Twentynine Palms Oasis by donation. This valuable area played an important part in the pre-history of this region and was likewise important during historic times as a source of water for early explorers and settlers. Early in 1954 a modern administration building was erected at the eastern extremity of the Oasis which is a credit to the Service as its design has been heralded with acclaim by everyone. The largest room in the building was designated for display of natural history materials and as an information center for Monument visitors. The building was formally dedicated on April 3, 1954, with a crowd of over 500 people in attendance. Dr. Philip A. Munz, eminent botanist and Director of the Santa Ana Botanic Garden at Claremont, gave the dedication address. Many civic leaders and scientists were also in attendance and each contributed appropriate remarks. It also marked the occasion when John Hilton, famous painter of desert scenes, contributed an inspiring painting depicting a scene in Lost Horse Valley to the National Park Service.

INTERPRETIVE SERVICES

During the early period of the Joshua Tree National Monument, all interpretive services were performed by the Superintendent. The program consisted mainly of talks to the tourists at the Monument office. When the staff became larger and a Park Ranger was added, talks were given at the camp sites.

With the addition of the Oasis to the Monument, a series of Nature Trails was born. Now, in addition to the trail at the Oasis, the Monument boasts five such trails: Cap Rock, the Cholla Garden, Indian Cave, Salton View and Indian Cove.

The outstanding animal of Joshua Tree National Monument is the Desert Bighorn. During the year many inquiries are received about this animal and many visitors are afforded the opportunity of seeing these mammals in their natural surroundings. The visitor is directed to Stubby Spring over a one and one quarter mile trail from the Juniper Flat Road and many times are successful in observing sheep and in getting good pictures.

Water has also been made available at Cottonwood Spring for the birds and animals and the visitors and campers enjoy the many birds resident to that area, and also observe gray and kit foxes, badger, and Desert Bighorn. Water has been developed at Elack Fock Spring and the occasional visitor there sees Desert Bighorn, deer and quail in that area.

In addition to this good trails exist over which visitors may hike to desert oases such as Forty-nine Palms and Lost Palms Canyon.

MISCELLANEOUSFires

The greatest fire loss in the history of the Monument was experienced June 23, 1948 when flames ravaged the 49 Palms Oasis. Although the fire encompassed little more than an acre, no greater damage could have resulted from a fire several times that size in any other portion of the Monument. Forty-four of the large Washingtonia palms were entirely consumed, except for their trunks, six were partially burned and only three were untouched.

This fire was fought by National Park Service, State Division of Forestry and volunteer personnel. Two teen-age boys picked up near the fire admitted their guilt.

Attention was given at an early date to the protection of the vegetative cover from fire; since the botanical display was considered to have no equal in the high desert terrain of Southern California. In fact the whole area is a truly magnificent plant sanctuary.

Beginning in 1942 Fire Control Aids were assigned to duty during the hazardous part of the summer season. Many small fires have occurred, but none of major proportions except the one mentioned above and another in July of 1942. Approximately 165 acres were burned over at the western extremity of Lost Horse Valley on Southern Pacific Railroad lands. This fire was man-caused and unfortunately was responsible for the death of Food Foreman Pete Mahrt, who succumbed to acute pulmonary edema while suppressing it.

Traffic Deaths

The first person killed in the Monument by traffic accident after active administration by the National Park Service was a young girl. Carol Anne Privatt, age nine, was killed on November 2, 1952 when she fell out of her father's pick-up truck while traversing the Pinto Easin Road.

On June 21, 1954, Sgt. John A. King, United States Marine Corps, was killed when the car in which he was a passenger failed to negotiate a turn near Sneakeye Spring and over-turned.

Air Crash

On July 4, 1944, eight men were killed in a mid-air collision of two Liberator bombers. Seven men bailed out of one of the crippled planes, the pilot and co-pilot having landed it at the Palm Springs Airbase. The pilot of the other plane was the only survivor of that ship.

Suicides

On October 27, 1954, two sisters, Edna and Clara Walsh committed suicide near the south boundary by use of carbon-monoxide gas from their automobile.

Publications

The August 1954 issue of La Vie del Mondo, printed in Milan, Italy, contained an article on Joshua Tree National Monument written by E. Egbert Schenck and Samuel A. King. This article was widely circulated in Europe.

SOME FRIENDS WHO HAVE PARTICULARLY HELPED THE MOVEMENT

Frank Bagley
 Elizabeth T. C. Campbell
 D.A.R., Twentynine Palms Chapter
 Arthur E. Demaray
 Desert Trail Newspaper
 Newton E. Drury
 Tom Hopkins
 Isaac Walton League
 Dr. Edmund Jaeger
 Harry James
 Walter E. Ketchan
 Dr. N. Moller
 Joseph Mowyer
 Dr. Phillip A. Muns
 Dr. Alden H. Miller
 National Audubon Society
 F. Egbert Schenck
 Sara H. Schenck
 Congressman Harry Sheppard
 Sierra Club
 C. Edward Graves
 Dr. Ian Campbell

 Dr. E. W. Gifford

 Sherman Clark

Twentynine Palms, California
 Tucson, Arizona
 Twentynine Palms, California
 Washington, D.C.
 Twentynine Palms, California
 Sacramento, California
 Twentynine Palms, California

 Riverside, California
 Banning, California
 Twentynine Palms, California
 Corona, California
 San Bernardino, California
 Claremont, California
 Berkeley, California

 Twentynine Palms, California
 Twentynine Palms, California
 Washington, D. C.
 San Francisco, California
 Carmel, California
 California Institute of Technology,
 Pasadena, California
 Museum of Anthropology, University
 of California, Berkeley, California
 Twentynine Palms, California

FRIENDS OF THE JOSEUA TREE NATIONAL MONUMENT

Frank Bagley	Twentynine Palms, Calif.
Elizabeth F. C. Campbell	Tucson, Arizona
D. A. R. Twentynine Palms Chapter	Twentynine Palms, Calif.
Arthur E. Demaray	Washington, D.C.
Desert Trail Newspaper	Twentynine Palms, Calif.
Newton E. Drury	Sacramento, California
** Mrs. Helen Faries	Los Angeles, Calif.
Thomas Hopkins	Twentynine Palms, Calif.
* Mrs. Sherman Hoyt	Pasadena, California
Issac Falton League	
Dr. Edmund Jaeger	Riverside, California
Harry James	Eanning, California
** Mr. and Mrs. E. Johansing	Pasadena, California
Walter E. Ketcham	Twentynine Palms, Calif.
Dr. N. Mellor	Corona, California
Joseph Moyer	San Bernardino, Calif.
Dr. Philip A. Munz	Claremont, Calif.
Dr. Alden E. Miller	Berkely, Calif.
National Audubon Society	
F. Egbert Schenck	Twentynine Palms, Calif.
Sara M. Schenck	Twentynine Palms, Calif.
Congressman Harry Sheppard	Washington, D.C.
Sierra Club	San Francisco, Calif.

* Deceased

** Donors of Oasis Site, where Headquarters was established.

APPENDIX A

PERSONNEL OF JOSHUA TREE NATIONAL MONUMENT

<u>Superintendents</u>	From	To	E.O.D.	C.O.E.
James E. Cole	Jr. Park Nat. Yosemite	Superintend. Joshua Tree	Sept. 17, 1940	Nov. 9, 1942
Walter G. Attwell	Assoc. Engr. Region Engr.	Act. Supt. Joshua Tree	Nov. 10, 1942	Dec. 8, 1942
Duane D. Jacobs	Dist. Ranger Yosemite	Act. Supt. Joshua Tree	Dec. 9, 1942	Mar. 3, 1943
" " "	Act. Supt. Joshua Tree	Act. Custodian Joshua Tree	Mar. 4, 1943	Dec. 2, 1943
Walter E. Ketcham	Clerk Ranger Joshua Tree	Act. Cust.	Dec. 2, 1943	Feb. 1, 1944
Frank R. Givens	Dist. Ranger Yosemite	Act. Cust.	Feb. 2, 1944	May 5, 1944
James E. Cole	U. S. Army	Custodian	May 6, 1944	Mar. 3, 1947
Frank R. Givens	Cust. Pinnacles	Custodian	Mar. 4, 1947	Nov. 22, 1948
" " "	Custodian	Superintend.	Nov. 23, 1948	Apr. 11, 1953
Samuel A. King	Supt. Saguara	Supt. JTNM	April 12, 1953	To Date
<u>Rangers</u>				
Harold S. Hildreth	Yosemite	Park Ranger	Jan. 20, 1941	July 19, 1941
John W. Stratton	Lassen	Clerk-Ranger	Oct. 1, 1941	Mar. 12, 1942
Hesmel L. Earenfight	29 Palms	Clerk-Ranger	Apr. 1, 1942	Aug. 13, 1942
Walter E. Ketcham	29 Palms	Clerk-Ranger	Oct. 5, 1942	Aug. 4, 1945
* Hesmel L. Earenfight	U.S. Air Force	Clerk-Ranger	Aug. 6, 1945	To Date
* John W. Stratton	U.S. Army	Clerk-Ranger	May 9, 1946	Nov. 11, 1948
* Note: Converted to Park Ranger Sept. 8, 1946				
George F. Swan	Lassen	Park Ranger	Dec. 27, 1948	May 15, 1950
Charles F. Adams, Jr.		Seasonal	Dec. 1, 1949	To Date

Rangers (Cont.)

Herbert D. Cornell Seasonal Park Ranger Sept. 20, 1953 To Date

Technical Staff

John S. Adams Yosemite Landscape Architect July 1, 1958 To Date

Fire Control Aids

Charles F. Adams Jr. April 15, 1950 To Date

Elmer F. Camp July 22, 1942 To Date

Joseph W. Tuberdyck Sept. 11, 1951 To Date

Clerk-Typist & Receptionist

Maisie Van Tassell Clerk Typist July 9, 1951 Sept. 17, 1954

Mildred I. Miller Clerk Typist Nov. 8, 1954 To Date

Ronald D. Miller Information Receptionist April 10, 1954 To Date

Maintenance Crew

Alva D. Connor Laborer Jan. 10, 1941 Dec. 10, 1941

" " " Truck Driver Mar. 1, 1949 Aug. 20, 1949

" " " Operator General Aug. 21, 1949 Mar. 9, 1952

" " " Mixed Gang Foreman Mar. 10, 1952 To Date

Robert S. Lake Yosemite Equip. Op. Mar. 1, 1941 June 20, 1941

" " " " " Oct. 24, 1941 Jan. 15, 1943

" " " " " Dec. 12, 1945 Dec. 11, 1946

" " " Mixed Gang Foreman Feb. 23, 1947 Apr. 15, 1953

John F. Bianco Laborer June 11, 1951 July 7, 1951

" " " Truck Driver July 7, 1951 July 3, 1954

" " " Operator General July 4, 1954 To Date

Harrison Y. Boling Laborer Aug. 21, 1941 July 31, 1942

Harrison Y. Boling	Truck Driver	Aug. 1, 1942	Oct. 5, 1946
" " "	Laborer Leadway	Oct. 6, 1946	Apr. 30, 1953
Phil D. Smith	Yellowstone Laborer	Feb. 17, 1941	To Date
Paul E. Katz	Laborer	March 14, 1954	To Date

APPENDIX E
 PROCLAMATION BY THE PRESIDENT
 OF THE UNITED STATES
 ESTABLISHING JOSHUA TREE NATIONAL MONUMENT
 Signed by President Franklin D. Roosevelt, August 10, 1936

WHEREAS certain public lands in the State of California contain historic and prehistoric structures, and have situated thereon various objects of historic and scientific interest; and

WHEREAS it appears that it would be in the public interest to reserve such lands as a national monument, to be known as the Joshua Tree National Monument:

NOW, THEREFORE, I, FRANKLIN D. ROOSEVELT, President of the United States of America, under and by virtue of the authority vested in me by section 2 of the act of June 8, 1906, ch. 3060, 34 Stat. 225 (U.S.C., title 16, sec. 431), do proclaim that, subject to existing rights and prior withdrawals, the following-described lands in California are hereby reserved from all forms of appropriation under the public-land laws and set apart as the Joshua Tree National Monument.

SAN BERNARDINO MERIDIAN

- T. 18., R. 5E., secs. 19 to 36, inclusive.
 T. 2S., R. 5E., secs. 1 to 6, 11 to 13, inclusive, and those parts of secs. 7, 8, 9, 10, 14, 15 and 24 lying north of the north boundary of the Colorado River Aqueduct right-of-way.
- T. 1S., R. 6E., secs. 19 to 36, inclusive.
 T. 2S., R. 6E., secs. 1 to 18, 21 to 26, inclusive, and those parts of secs. 19, 20, 27, 28, 34, 35, and 36 lying north of aqueduct right-of-way.
- T. 3S., R. 6E., that part of sec. 1 lying north of aqueduct right-of-way.
 Ts. 1 and 2S., R. 7E. (Partly unsurveyed)
 T. 3S., R. 7E., secs. 1 to 6, 8 to 16, 23 to 24, inclusive, and those parts of secs. 7, 17, 18, 21, 22, 25 and 26 lying north of aqueduct right-of-way.
- Ts. 1 and 2S., R. 8E. (Partly unsurveyed)
 E. 3S., R. 8E., secs. 1 to 30, 33 to 36, inclusive, and those parts of secs. 31 and 32 lying north of aqueduct right-of-way.
- T. 1S., R. 9E., secs. 5 to 9 and 16 to 36 inclusive.
 Ts. 2 and 3S., R. 9E. (Partly unsurveyed)
 Ts. 1 to 3S., R. 10E. (Partly unsurveyed)
 F. 5S., R. 10E., secs. 1 to 30, inclusive, and those parts of secs. 31 to 36 lying north of aqueduct right-of-way.
- Ts. 1 to 4S., R. 11E. (Partly unsurveyed)
 T. 5S., R. 11E., secs. 1 to 30, inclusive, and those parts of secs. 31 to 36 lying north of aqueduct right-of-way.

- T. 6S., R. 11E., those parts of secs. 1 to 6 lying north of
aqueduct right-of-way.
- Ts. 1 to 5S., R. 12E. (Partly unsurveyed)
- T. 6S., R. 12 E., those parts of secs. 1 to 6 lying north of
aqueduct right-of-way.
- Ts. 1 to 4S., R. 13E. (Partly unsurveyed)
- T. 5S., R. 13E., secs. 1 to 24, inclusive, and those parts of
secs. 28, 29, 30, and 31 lying north of
aqueduct right-of-way. (partly unsurveyed)
- Ts. 1 to 3S., R. 14E (Partly unsurveyed)
- T. 4S., R. 14E., secs. 1 to 11, 14, to 23, 27 to 34, inclusive,
and those parts of secs. 12, 13, 24, 25, 26
and 35 lying west of aqueduct right-of-way (unsurveyed)
- Ts. 1 and 2S., R. 15 E. (Partly unsurveyed)
- T. 3S., R. 15E., secs. 1 to 19, inclusive, and sec. 24; those
parts of secs. 20, 21, 22, 23, 25, 26,
29, 30, and 31 lying north of aqueduct
right-of-way (partly unsurveyed).
- T. 4S., R. 15E., those parts of secs. 6 and 7 lying west of
aqueduct right-of-way;
containing approximately 525,340 acres.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision management, and control of the monument as provided in the act of Congress entitled "An Act To Establish a National Park Service, and for other purposes." approved August 25, 1916 (ch. 408, 39 Stat. 535, U.S.C., title 16, secs. 1 and 2), and acts supplementary thereto or amendatory thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this 10th day of August, in the year of our Lord nineteen hundred and thirty-six and of the Independence of the United States of America the one hundred and sixty-first.

/s/ Franklin D. Roosevelt

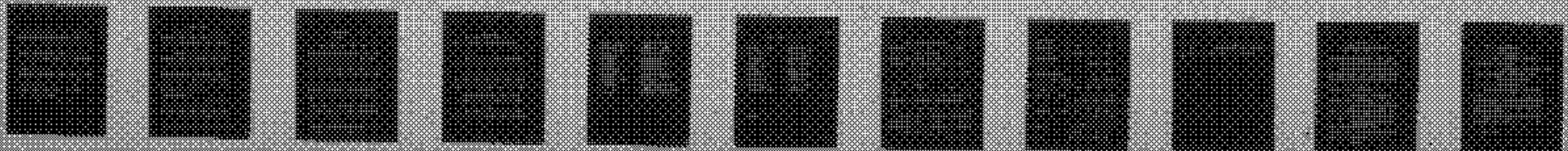
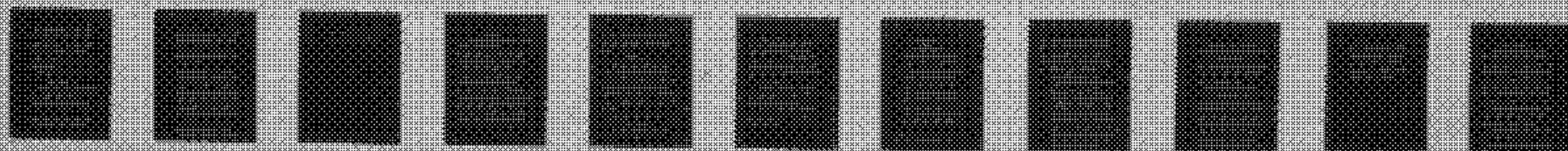
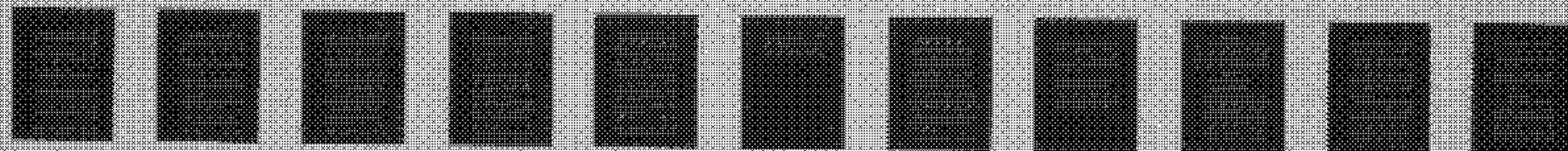
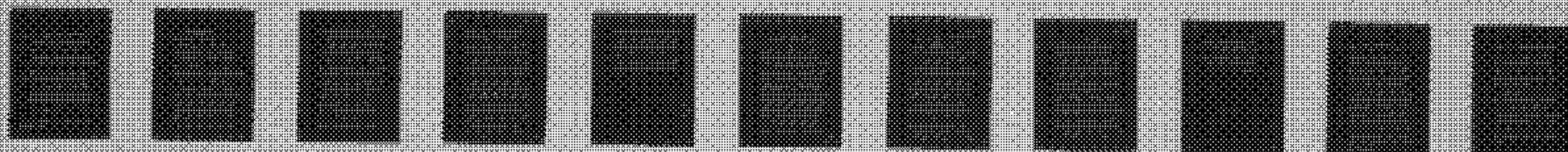
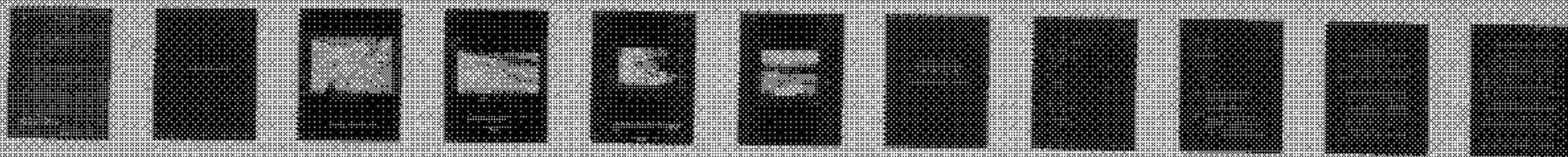
By the President
/s/ William Phillips
Acting Secretary of State.

156/D 21

A HISTORY OF JOSHUA TREE

1954

SHT 1 of 2



APPENDIX C
 ADDRESS AT DEDICATION CEREMONY OF
 HEADQUARTERS BUILDING OF JOSHUA TREE NATIONAL MONUMENT,
 TWENTYNINE PALMS, CALIFORNIA
 APRIL 3, 1954

by
 PHILIP A. MUNZ
 RANCHO SANTA ANA BOTANIC GARDEN
 CLAREMONT, CALIF.

Superintendent King, distinguished guests, ladies and gentlemen, I believe you can understand something of my interest in the developments that we have come today to acknowledge and dedicate when I tell you that my first visit to this spot was in April, 1921, 33 years ago this month. At that time I was teaching at Pomona College and we had as a visitor and lecturer from Harvard University for one month a distinguished zoologist, Dr. George Parker. During spring vacation my colleague, Dr. F. A. Hilton and I under the guidance of Mr. Edmund Jaeger of Riverside and Mr. E. French Gilman, of Banning, accompanied Parker to see the desert. Mr. Jaeger as most of you know, is an old hand on the desert and French Gilman, who was born at Banning, was of course another. His brother Arthur Gilman of Banning, Raymond B. Cowles then a student at Pomona and now Professor of Herpetology at U.S.L.A., and a high school senior from Riverside, David E. Keck, now head curator at New York Botanical Garden, were also in the Party. It was a dry season and very little was in flower, but Mr. Jaeger took us to a number of out of the way places, such as Piryon Wells and through great rock formations which he called "Garden of the Gods" and which are now in the present Monument. There we saw evidences of early Indian occupation. Finally he brought us to this spot. So far as I can remember I saw only one building here and that was a tumble down adobe without inhabitants of human nature, at least. We were delighted with Twentynine Palms. Here in this very dry year we found an oasis with all that the name implies. It was a green spot with a small sheet of water. It was teeming with birds and Mr. Gilman made a bird census. It was on this trip to that we spent some days in the area and saw no other human beings save one or two men at some of the semidefunct mining claims. When we got back to Claremont, Dr. Parker said, "You could not have taken me to a more interesting region; I felt all the while as though we were on another continent."

I could not help thinking this morning as we drove over from the coastal side to the desert, how rapidly change has come to this whole region. Twentynine Palms is not now on another continent. In fact, it looked to me as though it might not be many years until the road from Morongo Valley east will have to be zoned, so thick are the settlements becoming. I was impressed again by the importance of a region like the Joshua Tree National Monument being set aside not only for the enjoyment of those who want to visit the desert, but to preserve in as nearly its original form as possible the life of that desert.

Those of us who used to think of the desert as a place that belonged to no one, but to all of us, and who used to camp in one canyon then another, roading about freely without trespassing on private property, find that we can no longer do so. Every desirable spot, every spot with a seep or trickle, is now filled on and has signs "Keep Out". Now, I am one of those individuals who like not only to camp on the desert for fun, but who like to study its life, particularly its plants. Moreover, I am one of those naive persons who want to preserve for future generations of this country representative areas and indigenous life in all parts of the country. To me, therefore, who have lived long enough to see ushered in two or three periods with different approaches to the study of living organisms, it is important that such areas be kept in as nearly their primitive state as possible. Each such period of study had new techniques and teaches us new facts about living creatures, their methods of adaptation to their environment, their possible origins, their relationships, their uses.

You will say this is alright in theory, but people have to make a living. Areas even on the desert have to be made use of. Of course, they do. But what will be most useful to mankind as a whole, if we exploit all of an area, do we not risk extinction of species and loss of conditions that the future generations might have found valuable? We must remember that the Mojave Desert is fast changing. Grazing has brought in many European weeds which have followed the white man wherever he has gone, even to the desert. See how the Russian Thistle, tumbleweed-mustard and other weeds are now crowding out many of our own native more colorful annuals which may not be so spiny or of so disagreeable flavor, hence get eaten by cattle, leaving the field open for these European invaders. Large desert plots set aside with state of federal protection and with grazing restricted or forbidden, give the original vegetation the opportunity to maintain itself against such invasions. I know of no other way.

Feeling as I do, you can see why it is a great pleasure to me today to come before you and pay honor to those responsible for the setting aside of this area and for its development. So far as I am aware we are obligated largely to the efforts of one woman, Minerva Hamilton Hoyt. Mrs. Albert Sherman Hoyt came to California in the last part of the last Century. She and her family settled in South Pasadena. She had lost her son, and overcome with grief and despair she turned to nature for comfort, driving about by horse and carriage or riding horseback. She came to love the desert, its bigness, its color, its grandeur. Here she found healing and peace. She inspired others with the love for it and as she saw more and more exploitation take place, she yearned for the protection of some of the choicest spots. Through the National Park Service she secured the services of Mr. Dan R. Hull, an experienced California landscape architect, who drove over large parts of the desert with her. Together they selected tracts which they felt had unusual features of one sort and another and would serve as an outstanding example of the California deserts. Meanwhile interest had grown until the California legislature passed bills creating a state park here. Mrs. Hoyt hoped for national rather

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than state protection and persuaded Governor James Ralph, Jr. to withhold his signature until she could explore the possibility at Washington. She made personal visits to President Roosevelt and Mr. Harold Ickes, at that time Secretary of the Interior. The President promised her that he would withdraw the region from land entry until proper investigation and recommendation could be made. On October 25, 1933, he issued an Executive Order withdrawing about 1, 136,000 acres in Riverside and San Bernardino counties.

Mrs. Hoyt held, and I believe rightly so, that a desert park must be large, with great panoramas, if it is to represent the desert fairly and protect the desert life adequately. With my assistance hand made books of photographs in color were gotten together to show characteristic desert scenes and some of the outstanding species of plants from the region. These were presented to Mr. Ickes and the President to help give them an idea of why we felt this area worth while. Articles were written describing the plant and animal life. The National Park Service sent out Mr. Roger Toll to investigate the area and make recommendation. He came, as I remember it, in the late fall when it was very dry and cold. Mrs. Hoyt and I spent several days taking him about and trying to show him how wonderful it all was. I remember we rode in an open touring car, Mr. Toll and I on the back seat where we almost froze in the cold raw wind. He was a good sport, however, and chided Mrs. Hoyt about her "park" (this word being in quotation marks). Mr. Toll was from a Denver family and his experience I believe had been largely in the Rocky Mountain and similar Parks. Mrs. Hoyt told him he could not see any beauty in anything unless it had waterfalls and lakes. Well, there was much good natured bantering, but we felt after his departure that he wondered what kind of crazy fools we were to want a desert park.

We tried to emphasize in our communications to Washington that only a hundred miles from Twentynine Palms there was an immense and a rapidly growing population, that many of these people felt the lure of the desert and enjoyed travelling to it for longer and for shorter periods of time. Such a desert park would mean much to great numbers. Death Valley was already a National Monument and, while farther away, was attracting thousands of visitors each winter. As I remember it, Mr. Toll was killed not many months after his visit here in an automobile accident and I have of course no way of knowing whether he was in a large or a small way responsible for the dedication of this area, but I do know that he was a gentleman and a man of high ideal for the Park Service. At any rate, on August 10, 1936, a presidential proclamation established a Joshua Tree National Monument of 838,258 acres. Because of the Los Angeles Aqueduct cutting across the southern part of the region which they had envisioned for their park, those features were omitted which lay to the south of the Aqueduct, including such places as Painted Canyon, Hidden Springs and the north shore of Salton Sea. The Park Service could

see too many administrative difficulties in having the Monument in two separate tracts.

However, 800,000 acres are not to be sneezed at as being inconsequential. There are a variety of conditions and regions altitudinally and topographically. While not as diversified as the larger region originally asked for, this smaller acreage runs through two or three quite distinct life zones and begins with areas characterized by Creosote Bush and its associates, runs through what I call Joshua Tree Woodland and culminates in its higher summits in Piñon-Juniper Woodland. It has about as fine views as the desert offers, over vast expanses of the Mohave toward the north, toward the Cockscomb and neighboring ranges in the east, toward the Coachella Valley, Salton Sea and Imperial Valley to say nothing of the Santa Rosa Mts. toward the south, and of the San Jacinto and San Bernardino Ranges toward the west. It has most interesting and fascinating rock formations of great extent. In picturesqueness it offers much. In life of the past and of the present it has much of interest. Mr. and Mrs. Campbell in their years at Twentynine Palms found a wealth of materials and artifacts left by the Indians who inhabited the region, some of these from the Monument, but all from near at hand. This collection is now at the Southwest Museum in Los Angeles.

Plant and animal life of the Monument are quite rich for the desert. During the past few thousand years the whole Southwest has been getting drier and warmer and many species of living organisms have had to retreat northward or up the mountain slopes to maintain themselves. Many have perished completely, as did the giant sloth which lived on Joshua Tree leaves and other tidbits. Others are left as relicts and are on their way out; their survival is not helped by droughts such as we have had the past few years. So, in the Monument we find plants like the fragrant Lippia Eriothii and the yellow-flowered composite Palaestrophe Cooperi, both of which are represented here by a few individuals, occur again around the Providence and Clarke Mountains, and then in greater profusion in the states to our east. They are undoubtedly such relicts. On the other hand, we have relicts of a more western and coastal vegetation now found in the San Bernardino and other ranges to our west, but which at one time occurred here, for example the succulent, Dudleya ~~ambosa~~, the little Potentilla saxosa, and others. The largest oak tree in the Monument is undoubtedly some centuries old. I have grown seed from it and the seedlings show great variability, some promising to be shrubs like the common scrub oak of the region and others shooting up as if to be trees. Some have spiny-toothed small leaves; others larger more deeply lobed leaves like those of the mountains Black Oaks now within many miles of this tree. Were there some centuries back?

But in addition to such relict species the Monument offers others that are almost confined to its area, endemics so to speak. Take for example the shrub in the Cottonwood Springs area, Tetracoccus

Alverson of the rocky areas at ca. 4000 ft.

Animals are not usually so local in distribution as plants. In general, the Monument has a good representation of desert animals from the Bighorn Sheep and other mammals to birds and reptiles. To me this last named group is particularly characteristic of the desert, largely I suppose because unless the day is really hot, they are in greater prominence than other animals. I refer especially to the lizards, almost always to be found on sunny rocks in cooler days of in shade of bushes on warmer days. It is good to know that here is an area where these "denizens of the desert" to use Mr. Jaeger's phrase, are protected and can be expected to occur.

I was personally greatly saddened by the movement a few years back among local citizenry to chop off a large piece of the Monument as being of undoubtful mining value. I refer to the revision by Congress of the Monument's boundaries so as to reduce its area to 557,934 acres. From what I have been able to learn the mining output since this reduction has not justified this action. I hope that at some time this acreage may be in large part restored to the Monument.

The National Park Service has of course had its problems in connection with the Monument, some of which have been with it from the beginning and others which are growing with time. I refer in the first place to the unfortunate situation that prevailed of much of the land being privately owned at the time the Monument was created. I may say here that the Park Service wanted Mrs. Hoyt to give money or to raise some among her friends for purchase of some of this land. Unfortunately, the Monument was created at a time when private funds were feeling the effects of the great depression and she was not able to do this. It should be stated, however, that Mrs. Hoyt spent a good deal of her own money as well as much time in her efforts to enlist interest in the actual initial creation of the Monument. I understand that much progress has been made in recent years in acquiring privately owned lands and the Park Service is greatly to be commended for its success. Another sort of problem that must be acute in any desert park used by a large number of people is the slowness with which vegetation in a dry area can recuperate from mistreatment. I refer to such things as the gradual disappearance piece by piece of piñon and juniper trees around the camp grounds in the Monument. Each camper needs a bit of wood and hacks off a branch, not realizing that he chops away a half century's growth. I do not envy the Park Service these problems; they undoubtedly have many others. I do feel that the fact that the Joshua Tree National Monument was visited by almost 200,000 persons in 1953 is in itself a complete answer to any doubts ever held or expressed as to the desirability of setting aside this vast tract and opening it up, with suitable precaution, for the enjoyment of the public.

Today we gather to take recognition of a new development in the Joshua Tree National Monument. This development was made possible in the first place by the recent generous gift of Mr. and Mrs. Harry E. Johansing, by Mrs. Helen F. Faries, and by Mr. & Mrs. James Chadwick of the land on which we stand, these 60 acres at the east end of the Casis of Twentynine Palms. Although funds for the establishment of an administrative staff became available in 1940, the National Park Service has not owned its own headquarters until now. With the construction of the attractive and most fitting building which we have come today to dedicate, a new era begins for the Joshua Tree National Monument. As you go about in this charming place I am sure you all agree with me that it is most satisfactorily suited to effective administration of the Monument. It will enable visitors to secure needed information. Here can be developed a small museum exhibiting the most interesting and characteristic features of the Monument. Here can be established a small botanic garden naming the more conspicuous and characteristic plants to be found and to be expected in the Monument. Here can be exhibited outstanding flowers in bloom in the Monument at a given time. Here at a place so accessible to the public can be made available in a charming and effective setting those things the visitor wants to see and know. So, I say, this headquarters building marks the beginning of a new era for Joshua Tree National Monument. I congratulate you, Superintendent King and your staff, on this notable step forward. It will make possible a new attitude on the part of the public and of the Government toward the Monument. I hope too it means the beginning of other more commodious structures which may in time house permanently the various worthwhile collections, historical and ethnological, paleontological and biological as well as geological, that have been assembled or may be assembled for this region. It is a great thing to see this new development and to share in its dedication. I honor those who made it possible as well as those who have brought the Joshua Tree National Monument into being and to its present effectiveness.

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1. Schenck and Given, A Handbook of Joshua Tree National Monument
2. Rogers, John, The Geology of the Joshua Tree National Monument
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