

July 12, 1942

SUPERINTENDENT'S ANNUAL REPORT

Looking back over the past twelve months, it is difficult to comprehend that a year has passed. From the point of view of accomplishments, it is likewise difficult to see how it is possible to have kept so busy and yet to have accomplished so little. A proper evaluation of the work of this office, would probably show that much of the time of its personnel has been taken up with public relations. Another large item of time has been consumed in sitting and thinking. The problems which confront us are so without precedent to our experience that their solution necessitates research and thought.

Although we may fret at having done so little and having so little to show for what we have done, there is at least one compensation - we haven't done anything we now wish we had not done or that has to be made over. Not having to make hasty recommendations or decisions as to the type or location of a planned development has given us time to see the relationship of any specific proposal to the problem as a whole. It is very probable that we should be thankful to have had this time for planning rather than have been so busy with going projects that no time was left for deliberation.

Weather Conditions

On April 1, the operation and records of the Twentynine Palms Cooperative Weather Station were turned over to the Park Service. The information listed below has been obtained from the records and since it presents several interesting figures it is included in this report.

Summary of Twentynine Palms Climatological Record for Past Seven Years.

<u>Temperature</u>	
Average maximum temperature	82.0°
Average minimum temperature	51.5°
Average daily temperature	66.7°
Best for man	68.0°
Hottest month, July 1941	106.5°
Coldest month, January 1937	22.8°
Hottest day, August 11, 1940	118.5°
Coldest day, January 22, 1937	11.0°
Greatest variation	104.5°

Precipitation

Total rain for 7 yrs.	54.79"
Average rainfall per year for 7 yrs.	4.97"
Average monthly rainfall	0.41"
Average daily rainfall	0.014"
Days rained in 7 years	156
Days rained per year	22.3
Days rained per month	1.84
Wettest month, September 1939	8.38"
Wettest day, December 24, 1940	1.85"
Driest year, 1937	1.55"
Days cloudy in 7 years	350
Average yearly cloudy days	50
Average monthly cloudy days	4

It will be noticed that the average daily temperature of Twenty-nine Palms for the last seven years is 1.3° below the temperature considered best for white men. We know figures don't lie, and so can account for this anomaly only by presuming it is based on the premises of a person living with his feet in an oven and his head in a refrigerator. Although high temperatures are normal for about four or five months each year, it is possible to live in this arid region quite comfortably by using evaporative coolers. This is possible because of the humidity which is reported, but not confirmed by us, to be extremely low. Studies published by the Scripps Institute of Oceanography indicate that Twenty-nine Palms is within thirty miles of the third most arid place reported in the world.

Investigation of New Park Areas or Boundary Changes

On several occasions the superintendent has accompanied Washington Office and Region Four Headquarter officials to the proposed Palms Canyon National Monument.

Considerable study has been given to boundary changes, but no final recommendations have been made by this office. An extension of the monument to include lands between the present southern boundary and the Metropolitan Water District Aqueduct is being considered. No changes are being considered for the eastern part of the monument as it is believed best to withhold action until more is known about the mining situation.

Status of Private Lands

No progress is being made and but very little effort is being expended to solve the largest problem existing here - the private land situation. Most of our efforts have been directed at determining the exact status of private lands in the monument. This phase of the work has been consummated but it will take many months of work before the present monument force can assemble all the data for submission in presentable form. Due to the fact that the original Park Service dealings with the Southern Pacific Land Company and with the State Division of Land were started at Region Four Headquarters and also due to the location of the offices of these agencies in San Francisco and Sacramento, all handling of these matters have been

left to the Region. The superintendent and Regional officials have contacted both agencies once.

Southern Pacific Lands

The land agent for this company has restated the position taken previously that the Southern Pacific is not interested in exchanging lands. At a conference in June, the land agent agreed to quote a new and lower price on Southern Pacific lands in the central part of the monument. To date no word has been received from him.

State School Lands

No efforts have been made this year to present the problem of exchange of lands to the California State Lands Commission. Conference was had in December with the official in charge of State School Lands but he could not speak for the Commission. His only suggestion to us was to gradually eliminate State School lands in Park Service areas by the sale of scrip lands which will be a slow process.

Tax Deeded Lands

Several thousand acres of tax deeded lands exist in the monument. Due to the new tax code which went into effect this year, all of this land is now withheld from acquisition by previous owners and cannot be sold at tax sale until classified. It is the belief of many people, who might be expected to know, that this part of the new tax code will be found un-constitutional as to lands tax deeded prior to the date the code became effective. It may however, control as to lands tax deeded subsequent to June 1, 1941.

Mining Claims

Cancellations of mining claims continue to be received by this office. All such cancellations have been made because the claimants failed to answer charges denying that the lands were non-mineral in character. A large number of claims estimated at 5000 could be cancelled if funds were available for advertising. Mining activity is at a very low ebb. Essential materials cannot be obtained for gold mining and no other minerals for which priority could be secured for mining operations have been found excepting iron. A large body of good iron ore has been blocked out in the Eagle Mountains by the Bureau of Mines. This office has no information as to what may come of this investigation. It is known that the Bureau of Mines officials are now exploring iron ore deposits northwest of Twentynine Palms.

Plans, Maps and Surveys

Under this topic much could be written, not about that which has been done so much as that which needs to be done. Sound development of an area cannot much proceed engineering field studies. In general, it would seem

that a new area has more need of engineering assistance than other areas yet Joshua Tree has had but very little help of this nature.

Of considerable importance here is the fact that there has been a large amount of survey work done in Joshua Tree by other agencies, for instance, the northern boundary is on the San Bernardino Base Line while part of the southern boundary is along the Metropolitan Water District Aqueduct. Both these lines have been precisely surveyed and in addition many intermediate stations have been established. The 89th. Army Engineers have spent several months in the monument running levels and traverse lines and establishing other triangulation stations. The result of all this work is a marvelous set of primary survey data providing it was all assembled on one map. But this data cannot be superimposed on the present monument base map as it was constructed on plane rectangular coordinates and not by polyconic projection. As a consequence we cannot use the precise data but have to rely upon General Land Office survey plats which at the best are only fairly accurate and in the case of the 1855 surveys they are so inaccurate as to be of no help at all.

No survey of any kind exists for the monument road system, although it is fairly accurately shown on a map produced by this office. A survey should be made where roads cross private lands so that rights of way can be obtained.

General Publicity

Due to the lack of improvements in the monument, no effort has been made to obtain publicity for the area. In fact, a definite policy is enforced to try to discourage publicity. The attitude of this office is that to invite the public to a Park Service area which lacks all the developments and protection the public expects to find in such areas, not only inconveniences the public but embarrasses the administration when called upon to explain why this monument has not been developed. A subsidiary fact, is that due to the highly organized nature of the Southern California publicity agencies, this office is definitely alarmed at what could be done should an organized effort be made to capitalize on publicizing the only Park Service area near Los Angeles. A fact probably not as yet thoroughly realized is that Joshua Tree National Monument is located within three hours drive of several million people. These people not only possess more cars per capita than any other area excepting Washington D.C., but are, in addition, accustomed to driving long distances for recreation. Records from Yosemite and Sequoia National Parks show that more than fifty percent of their campers come from Southern California.

Officials of the Automobile Club of Southern California have made the statement that they could by publicizing the monument put two thirds of the visitors into the monument who in normal years drive to the desert when it is at its best. A few years ago a traffic count showed 20,000 cars passing through Banning headed for the desert on one week-end. This is an ominous

figure so this office discourages publicity at the present time.

General Complaints

The majority of the complaints received by this office are directed at the lack of campground facilities. The public has been so accustomed to expect to find campgrounds in Park Service areas that they are somewhat disappointed to learn after arrival that Joshua Tree has neither water, toilet facilities or designated campgrounds. By appealing to their pioneering spirit and directing them to the few places where water is available most of these campers are at least partially satisfied.

From an administrative viewpoint, the most disconcerting fact is that camping cannot be confined to designated areas. The natural tendency for campers, if not otherwise restricted, is to select the most scenic spots and proceed to destroy them. Not having developed campgrounds nor adequate ranger service nothing can be done now to alleviate this trouble but to trust that campers will not destroy the most scenic parts of the monument. Another disconcerting fact is that we have no control over some of the camping because it is done on private lands.

Maintenance

The only improvements made in the monument requiring maintenance has been the betterment of a few miles of roads. To date approximately \$10,000 has been spent in grading and widening 66 miles of the several hundred miles of roads existing in the monument. About \$8,000 of these funds has been expended on the 38 miles of road between Twentynine Palms and Keys View. The remainder of the improved roads have been worked just sufficiently to keep them passable.

Due to the lack of rain which is essential for the betterment and maintenance of desert dirt roads, the showing this year does not compare with the progress made last year. Practically all the precipitation this year was either in such small quantities that it did not sufficiently moisten the soil or it fell as snow which because of its novelty to desert dwellers and visitors resulted in more damage than good. The subsoil remained saturated so long that the surface had dried before the heavy power grader could work the roads and smooth the ruts made when melting snow covered the roads.

If the soil of the desert dirt roads can be worked while damp, traffic forms a glazed surface that keeps the surface from corrugating. Very little glazed surface was made this year and a greater maintenance problem was present than existed last year. Reduced traffic and the use of a broom drag solved this problem.

Cloudbursts last summer and fall seriously manaced the roads and in places destroyed them completely. By constant patrol when cloudbursts were imminent, the road crew with the assistance of the superintendent and ranger saved several sections of the roads which otherwise would have been lost.

The only final solution to the maintenance of these dirt roads is oiling. Erosion from traffic, wind and water constantly lower the surface which results in a continually deepening channel. The drainage problem thus becomes more difficult and in the event of a cloudburst the roads which generally run down the long fans become streams. Prompt work by diverting water will save the road, but sooner or later, and probably sooner with anticipated reduced allotments, a cloudburst will find the road unattended. The cost of repaving such a road will probably be many times the cost of oiling it. From the standpoint of economy of Government funds, oiling of these desert roads should have a high priority standing amongst Service projects. It is realized that no funds should or will be made available for the duration, but if the roads weather this period they should be oiled as soon as possible thereafter. Such work should not be done, however, until they have been thoroughly studied by engineers. As is pointed out under surveys above the Service does not even know at all accurately where these roads are located. Not enough so, in fact, for this office to request and obtain Rights of Way where the roads cross private lands. In addition, since their location was of necessity determined by the location of previously existing roads or desert trails, some minor changes ought to be made before they are oiled. These changes should be made by engineers, not a superintendent untrained in road construction and a grader operator.

A problem that requires solution and should proceed further improvements of these roads is the large amount of private lands in the monument. This office feels that continued improvement of roads will enhance the value of private holdings and thus retard their ultimate acquisition. The position of the local administration is that no recommendation can be made for oiling until the land problem is solved or until there is some probability that it can be solved.

Improvement of Approaches to Park Area

San Bernardino County has improved the three short roads which connect the monument road system with the Twenty-nine Palms Highway. All three roads were graded and widened but not oiled. A minimum amount of work only was done on the Quail Spring entrance. This corresponds to the Service policy of maintaining this section just sufficiently to allow safe passage. A new road was cut into Indian Cove to connect with the monument road there. Considerable work was done by this agency on the Twenty-nine Palms entrance road.

In addition to these roads, San Bernardino County has spent much time in bettering and maintaining the road to the Dale Mining District. About six miles of this road where it parallels the monument boundary is half in the monument. The county maintained an additional eight miles in the monument from Old Dale to Supply Mine (new location of Gold Crown Mine) and on to the intersection of the old road and the county line. The old road was abandoned in part due to cloudburst damage. This was not a new location

but improvement of an old road.

Riverside County has made a few passes at the road from Cottonwood Spring to the mining district on the northedge of Pinto Basin.

Cooperating Government Agencies

Field examiners of the General Land Office have done a great deal of work this year in and for the monument. A total of approximately fourteen months time was spent in the field by four examiners. Another examiner put in a month and a half checking land records in Riverside County.

Field examinations of mining locations in the western part of the monument are practically completed except for rechecking. Much of the work this year in the eastern part was in the nature of reconnaissance.

Increase or Decrease in Travel

Joshua Tree National Monument shows an increase in travel this year despite the rubber shortage. Most of this can be attributed to road betterments, but much of it is due to the 29 Palms Air Academy. Officers are now and many people come to Twenty-nine Palms to see the gliders or service men assigned here and visited the monument on the trip. Summer travel has been increased because of the use of the monument to escape the heat of Twenty-nine Palms by academy employees of which there are over 250 now. Some of the increase is also due to the conservative travel figures submitted last year. All travel figures are estimates but this year a more reliable count was obtained by the road crew.

Police Protection

Many violations of monument regulations have occurred. This applies particularly to hunting regulations. In all but one of these cases warnings only have been issued. This course of action has been followed because the nearest U. S. Commissioners are 98 miles or more distant depending upon in which county the crime was committed. There simply are too few employees here to enable us to follow through on a uniform policy of prosecution of hunters. An exception was made in the case of two mountain sheep hunters. A complaint was filed in the U. S. Attorney's office at Los Angeles but to date no action has been taken by that office. The private land situation in the monument complicates the enforcement of many regulations. Before we could make an arrest for the violation of hunting regulations it would be necessary for the arresting officer to know absolutely that the violation occurred on Government land as the Attorney General of this state holds that hunting is permissible on private lands within national monuments. Since every other section of land in the western part of the monument is private land, it is just about impossible for a man on patrol to know absolutely that any piece of property is private or Government.

Desert Fire Extinction

The fact that desert vegetation will burn has been of considerable interest to all people concerned with monument fires. All the old timers of this area have insisted that fires would not travel over the desert. They have based their opinions on the basis of their efforts to clear land by burning. Evidence is at hand, however, to indicate there have been many fires in the higher mesas and canyons. Previous to the fire of July 4, 1948, no Service employee had fought or seen a fire in the monument, consequently no definite plans could be made for their control. With the experience of two fires, one in and the other just outside the monument, this office is now in a position to recommend fire suppression methods. With only two permanent employees and no fire fighting equipment except two back-pack pumps there is little that can be done now but plan for the time when adequate equipment and men are made available and to trust that fires do not ravage the monument in the interim.

James E. Cole
Superintendent.