

NATIONAL PARKS



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weathered american chestnut trunk
jack jeffers photograph

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COVERS *Death Valley National Monument, by Ed Cooper*
Death Valley National Monument is a vast natural museum containing representatives of all the great divisions of geologic time. Contortions, tiltings, intense heat and pressure from changes in the earth's crust, and sculpturing of the landscape by water, wind, and gravity are forces that have created the unique and beautiful Death Valley as we know it today. The striking badland topography at Zabriskie Point (front cover) was caused by torrential rains on lake beds during the Tertiary Period. As the clay surface of the beds eroded from rivulets, deep gullies developed. The more resistant layers of gravel and lava eroded less quickly and now stand out as prominent ridges. Dantes View (back cover) offers a magnificent view of the Panamint Mountains and the valley below. (See page 4.)

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ED COOPER

DEATH VALLEY

desert wilderness in danger

Death Valley National Monument needs stronger protection from invasions of exotic plants and animals, man's vehicles, and mining activities

by HAROLD WM. WOOD, JR.

In February of 1933, President Herbert Hoover signed an Executive Order that created Death Valley National Monument. The area was closed to mining and settlement, and its natural features were to be protected. Four months later Congress passed a law permitting resumption of mining activity within the national monument. Since then the monument has been enlarged several times, but the combined effects of the preceding legislation, soaring visitor use, and other problems have obscured any benefit of enlargement.

Originally established to protect the "unusual features of scenic, scientific, and educational interest therein contained," the monument now suffers from an onslaught of more than 500,000 visitors a year. The dilemma of recreation versus preservation, common to all the national parks and monuments is nowhere better exemplified than in Death Valley. With half a million visitors a year, most of them concentrated into the winter months, management of the area to preserve its wilderness characteristics is extremely difficult. Mass recreation, rather than preservation of natural values, seems to be the byword. Most of the people bring with them campers, trailers, mobile homes, and other mechanized paraphernalia with which they crowd the campgrounds. Many people drive jeeps into the back country or ride motorcycles, dune buggies, mini-bikes, or trail bikes.

Some seven hundred miles of paved and dirt roads are open to vehicles in the monument although most of the roads were constructed not for visitor use, but as access to mining sites long since abandoned. Such roads lead nowhere, but they are kept visible by present explorers. The result is almost permanent scarring, destruction of fragile

desert flora, and disturbance to desert creatures such as the bighorn sheep.

For many years off-road vehicles have been used to reach locations where foot exploration could begin. Hardy "desert rats" and intrepid rockhounds drove into remote areas and came back with tales of isolated canyons and beautiful mountains. Even these reports did not get too many other people interested, until gradually a cult began to form—not around the desert lore, but around the machines themselves. For many people today the use of these vehicles is a sport in itself. They do not seek access to the natural features of an exciting desert landscape; they seek only the thrill of bumps and accelerations.

There is no need for vehicles to drive *off* the roads in Death Valley, for there is hardly a need to drive *on* the multiplicity of dirt roads. Park Service regulations reflect this fact, for it is not only forbidden to drive off the roads, but new regulations require a state highway license even for motor-bikes. Sadly, the old scars are incessantly renewed by travelers wanting only a joyride, and new scars are made by people who ignore the regulations and can only be regarded as vandals.

Off-road vehicles not only damage desert esthetics; they trample many desert plants. The California Native Plant Society has listed eighteen endemic plants in Death Valley as being rare or endangered. Many of these plants are survivors from prehistoric periods when Death Valley was more moist than it is today. These species of plants were isolated by alkali sinks, sandy wastes, and rocky mountain ranges. Most show unique adaptations to the desert environment, but some are confined to habitats that approximate conditions that were more widespread thousands of years ago. A few rare plants may be found isolated high atop the Panamint or Armagosa ranges, and others are found only in wet years in a few Death Valley

Mud cracks in the valley floor at Death Valley National Monument. A steep alluvial plain can be seen in the background.



CECIL W. STOUGHTON, NATIONAL PARK SERVICE

ROBERT SCHOLL



The Beauty of Death Valley's shifting sands and mountainous backdrop is framed by an unusually shaped piece of deadwood, above. At left and below, however, the land contained within the monument shows signs of abuse and scarring. Some of the scars are caused by off-road vehicles that not only mar the landscape but destroy endangered desert plants. Other signs of abuse were caused by mining activities, past and present. The picturesque miner and his burro have been replaced by the bulldozer, helicopter, and other sophisticated mining equipment. With the new technology, remnants of old mines and ghost towns are threatened as well as the natural values of the monument. Although few mines are active today, 47,000 mining claims are scattered throughout Death Valley, posing a potential threat and presenting legal difficulties in managing the monument.



FRED E. MANG, JR., NATIONAL PARK SERVICE



Campers and trailers crowd the campgrounds at Death Valley, particularly in the winter months.

NATIONAL PARK SERVICE



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Exotic and introduced species have caused the decline of native flora and fauna in many natural areas. In Death Valley feral burros, offspring of the burros of early miners, trample rare plants and compete with the native bighorn sheep. This competition has resulted in a reduction of the sheep population.

washes. When groups of jeeps or motor bikes go roaring up desert canyons and washes, they threaten to decimate the last of these unique species.

Another cause for destruction of rare native plants is the invasion of species not native to the region. Feral burros, offspring of the burros of the early miners, trample and graze rare Death Valley grasses and flowers. The tamarisk, a native shrub of Africa, has taken over in many of the wet areas, assimilating the scant water supply, and crowding out native plants.

These two exotics, the burro and the tamarisk, threaten more than the native vegetation. The rare desert bighorn sheep is a sensitive creature that has only a few refuges left, one of them being Death Valley. The tamarisks choke the few watering places with growth, sucking up the life-giving water and making it unavailable for the sheep. The feral burros compete with the bighorn sheep and other creatures for palatable, edible plants. Burros also muddy up the water holes and defecate in them. Such pollution does not seem to bother the burros, but bighorn sheep require isolated watering places with clear, clean water.

Every year there are more and more burros and fewer sheep. The Park Service is conducting research to determine how best to manage the burros. The choices seem to be live capture and relocation or direct reduction by Park Service personnel or both. The Park Service also is attempting to eradicate the tamarisk, but this problem, too, is difficult to solve.

The greatest mistake in the history of Death Valley was the reopening of the national monument to mining. The four months that elapsed between creation of the monument and repermitting mining seems a sufficiently short time to arouse suspicions of intense lobbying from the mining industry, but in fact this may not have been entirely an example of greed. In a letter to the Congress, then Director of the National Park Service Horace Albright supported the bill allowing mining. Director Albright said, "In recommending the establishment of this area as a national monument, however, it was not the desire to prevent prospecting and mining within the area, as such activities would in no way interfere with the preservation of the characteristics of the area sought to be preserved. In fact,

the picturesque miner is one of the characteristics which give the area the color of the early pioneer days, and his continuance there would be a very desirable feature of the area under national-monument status." (*Congressional Record*, March 3, 1933, page 5436.)

This romantic vision was enough to get Congress to permit mining in Death Valley, but today the vision is not so romantic. The grizzled miner and his burro searching for gold, silver, and antimony are gone, and in their place are the bulldozer, the helicopter, and million-dollar mining equipment extracting lead, talc, and borax from large open-pit mines. The historical mines and ghost towns of Death Valley do give a flavor of the color and spirit of the Old West. But, ironically, the modern mining practices threaten to destroy the remnants of these picturesque old mines and ghost towns, as well as the natural values of the monument.

Even a few active mines in Death Valley today are an insult to the ideals behind a special reserve such as a national monument, but in fact some 47,000 mining claims are scattered throughout the monument. Death Valley is considered one of the most thoroughly prospected areas in the West. Most of the claims are worthless, but they present legal difficulties in the management of the national monument. Some of the claims are owned by large mining companies, such as U.S. Borax and Tenneco. Although today it is economically unfeasible to extract the minerals found in most of these areas, the price of many minerals is increasing, and mining may become feasible in the future. Among the items produced with minerals extracted from Death Valley are ceramics, glass, steel, enamel, fabrics, and electrical insulation.

The threat is not simply one of development of mining sites. Mining law (primarily, the Mining Law of 1872) allows claim owners to build whatever roads they please to get to their mining claim. Death Valley already bears the scars of too many roads of this type. More can be expected unless something is done to halt further exploitation of mining sites.

In twenty years, Death Valley could become one vast mining district. Roads could be blasted and bulldozed across the landscape to provide access to the mines. Ore would be hauled out, business would boom, and we would pay the price by losing the greatest desert wilderness in North America.

An example of the kind of devastation mining exploration can cause is shown in a back-country spot called "Hole-in-the-Wall." Large areas bear the scars of roads built around and about an undeveloped mining claim. Apparently the mining company did not think that it was enough to build a road merely to their site; they crisscrossed the whole area with bulldozers. One gash leads down into a wash, crosses, and stops. Another gash goes partway up a hillside and stops abruptly. Another winds around in between to finally dead end. After following a maze of false starts and dead ends, a person walking the bull tracks will find a final dead end. Half of the dead end roadways are isolated on the far side of a washout. And where is the claim marker? Up on the hilltop, away from the roads, and spray-painted silver to be easily seen by helicopter. There was no need for *any* road at all inasmuch as the company apparently decided to use a helicopter.

At present, the only recourse for the Park Service is to

acquire the patented mining land. Last year they acquired the Keane Wonder Mine, but funds for such projects are usually limited and there are literally thousands of mining claims to deal with.

A public hearing is upcoming on the suitability of classifying portions of Death Valley in the National Wilderness Preservation System. Under the Wilderness Act of 1964 the Park Service was required to make a study of wilderness suitability and to present a proposal.

But even wilderness designation will not solve the mining problem, for although roads and developments are excluded from designated wilderness areas, the law expressly permits new mining claims to be made until 1984. This mining exception was a compromise included in the Wilderness Act as a price for its passage. Efforts have been made to delete this provision from the Wilderness Act, but thus far they have been unsuccessful.

These facts leave a few major alternatives for saving Death Valley from becoming a mining district. One possibility is that the Death Valley wilderness designation proposal will specifically include a measure to establish a moratorium on new mining activity. Another possibility is that the obsolete Mining Law of 1872 may some day be repealed or updated.

More secure protection for Death Valley could be provided by upgrading its status from a national monument to a national park. A national monument is created by presidential order and it can be abolished in the same way. In the past, several national monuments have been so abolished. National parks, on the other hand, can be designated only by Congress and are ensured of the greatest degree of protection possible. Combined with a substantial wilderness classification, national park status for Death Valley would provide the National Park Service with stronger protective and management authority. Such designation has been recommended by the Park Service's Advisory Board on National Parks and by reports made by the Park Service itself.

The upcoming Park Service hearing on the Death Valley wilderness proposal will give interested citizens an opportunity to express their views on the questions of wilderness classification and national park status for Death Valley. Copies of the Park Service wilderness proposal for Death Valley can be obtained by writing to the National Park Service Western Regional Office, 450 Golden Gate Avenue, San Francisco, California 94102. Citizens can also ask to be notified of the time and location of the Park Service wilderness hearing, and can submit letters stating their views if unable to attend in person.

Death Valley is a great scenic, historic, and scientific treasure. Man must not be allowed to destroy it by his misguided activities. ■

Harold Wood holds a degree in renewable natural resources from the University of California at Davis. He has served as a consultant in environmental education and is currently employed by the California Department of Parks and Recreation.



ED COOPER



For many years, NPCA's main interest has been in protecting national parks from destruction of natural values by excessive roads, off-road vehicles, mining, airport construction, overt commercialism, and traffic abuse. Now we are advocating wilderness and other natural preserva-

tion in the national parks, methods of preventing destructive impacts of mass recreation, and additional funding for Park Service interpretive programs. The support of you and your friends through membership and contributions will go far in helping us accomplish these goals.

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