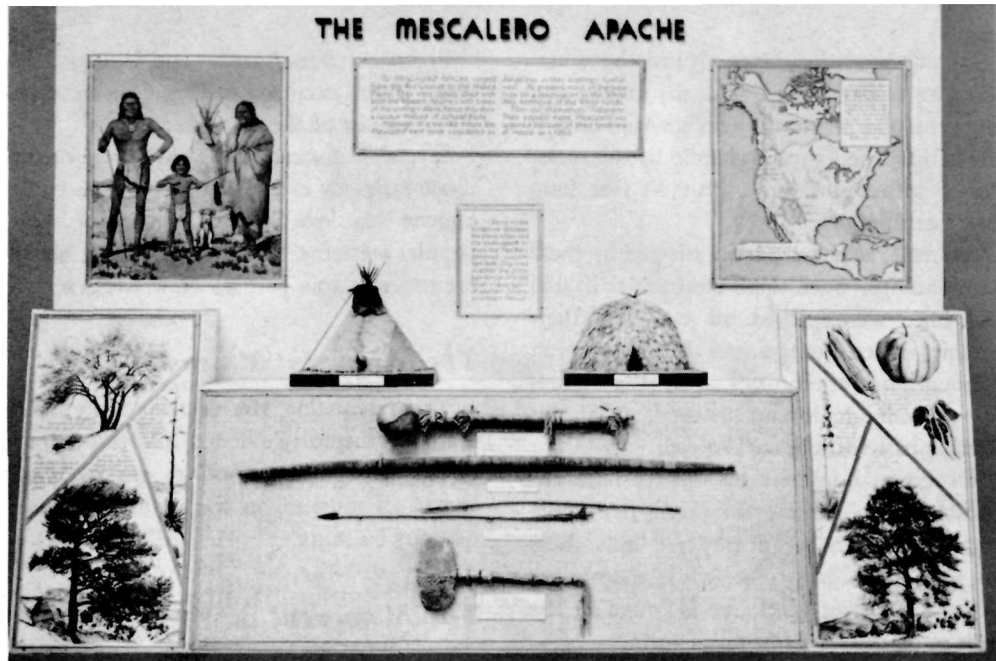


THE MESCALERO APACHE



An Indian exhibit in the museum.

Location

The monument is in south-central New Mexico, on U. S. 70. It is 15 miles from Alamogordo, 54 miles from Las Cruces, and a little less than 100 miles from El Paso, Tex.

Visitor Use Fees

A 15-day permit fee of 50 cents is collected at the entrance for each automobile, motorcycle, and house trailer. An annual permit for the calendar year in which purchased, costs \$1. During the valid period of all 15-day permits, the cost thereof may be applied toward the purchase of a similar annual permit. All fees are deposited in the United States Treasury and offset, in part, appropriations made for operating the monument.

Facilities

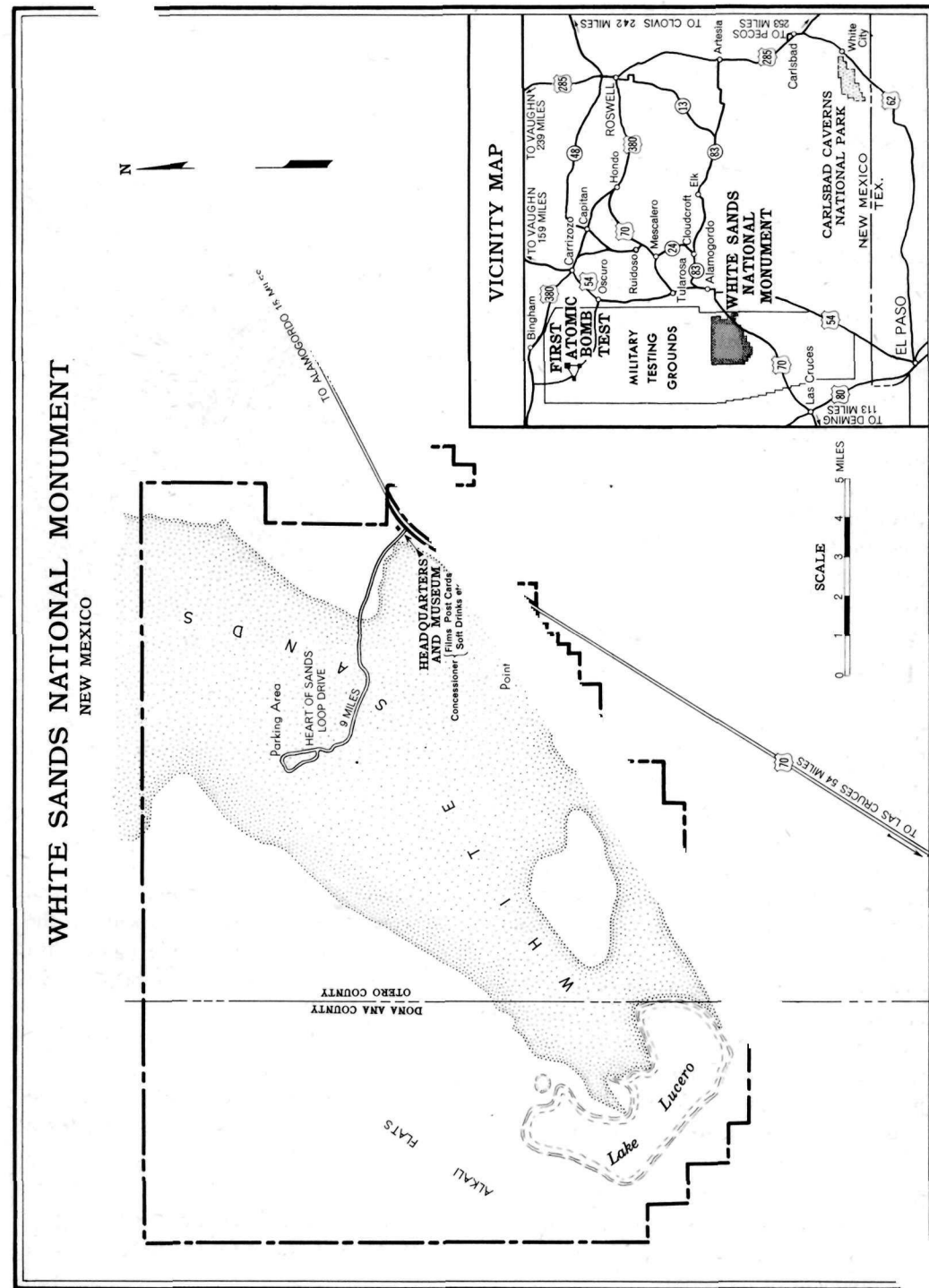
Although neither meals nor accommodations are available at the monument, facilities may be found in Las Cruces and Alamogordo. A picnic area, with tables and fire grills, is provided for those who bring lunches. A concession at headquarters sells souvenirs and refreshments.

Administration

White Sands National Monument is administered by the National Park Service of the United States Department of the Interior. A superintendent, whose address is Box 231, Alamogordo, N. Mex., is in immediate charge.

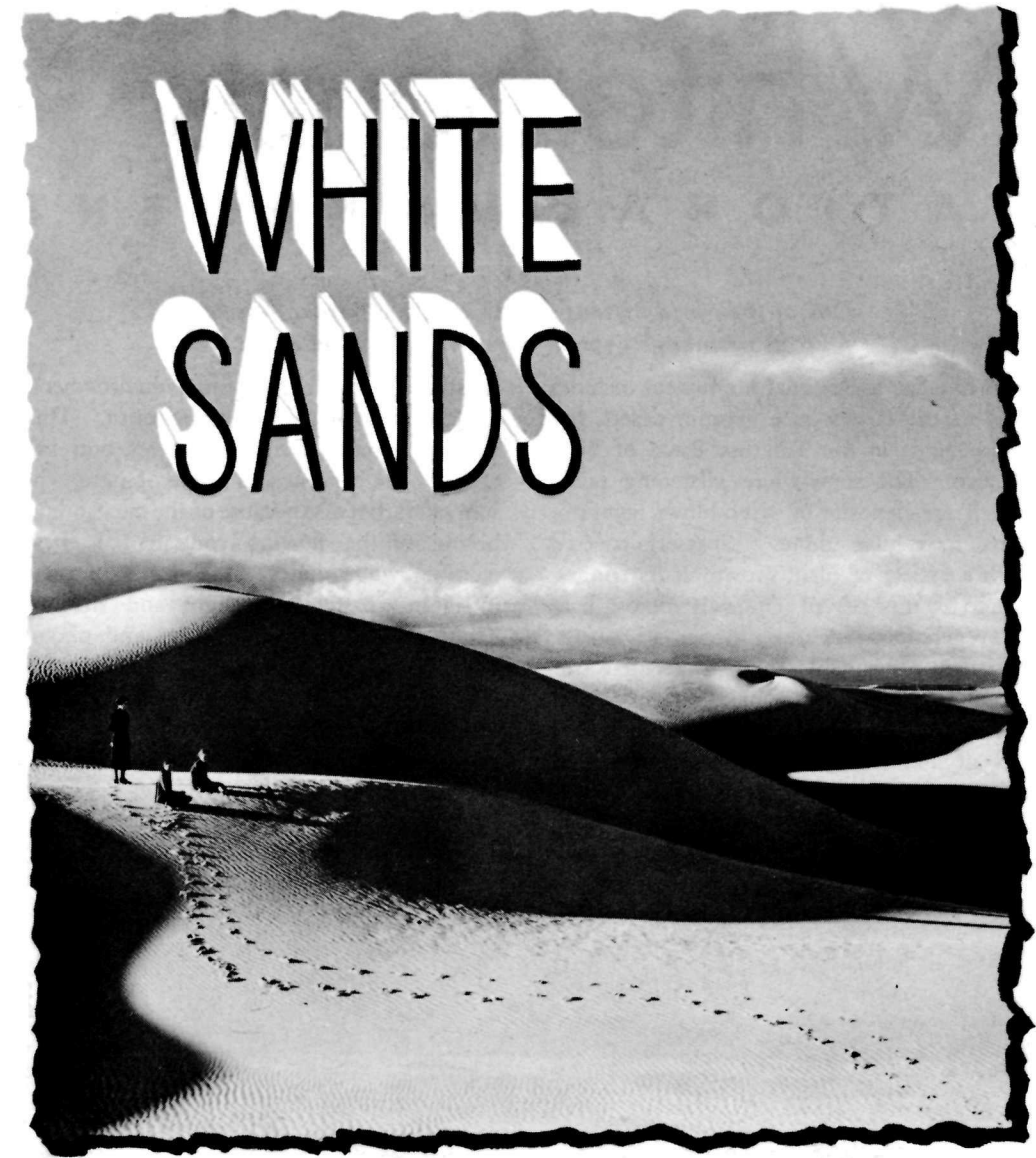


UNITED STATES
DEPARTMENT OF THE INTERIOR
Douglas McKay, *Secretary*
NATIONAL PARK SERVICE
Conrad L. Wirth, *Director*



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NATIONAL MONUMENT

N E W M E X I C O

White Sands

NATIONAL MONUMENT

*One of the world's strangest and most spectacular deserts,
with huge gypsum dunes of purest white*

White Sands National Monument includes part of the largest rare gypsum desert, the white sands in the Tularosa Basin of New Mexico. The snow-white glistening sands which are deposits of wind-blown gypsum, drift into huge dunes. Sparsely covered with a variety of plant growth at its fringes, much of this sea of dunes is almost bare of vegetation. A few species of plants, remarkably adaptable to their peculiar surroundings, have been able to resist burial under the ever-shifting dunes. Several species of animals have a protective bleached coloration which enables them to be in-

conspicuous in their strange environment.

Here is a unique bit of America. This area is of national significance not only because of the concentration here of pure gypsum sands, but also because of the outstanding beauty of the flowing contours of these dazzling white dunes, and because of their intriguing patterns of light and shadow. These are especially impressive and photogenic during early morning and late evening when the sun is low. Perhaps equally beautiful is the eerie effect of moonlight upon the undulating dunes of White Sands National Monument.

Sand dunes of pure gypsum encroaching upon the flats.



Geology of the Gypsum Dunes

The Tularosa Valley stretches more than 100 miles north and south between two mountain ranges. All sides of the valley slope gently inward to form a basin with Lake Lucero as its lowest point, at the southwest extremity of White Sands.

High above the basin floor, beds of gypsum are found in the mountain ranges flanking the valley. Similar gypsum beds are found beneath the floor of the basin. This indicates that the basin was once part of a huge block of high plateau which slowly sank to its present level millions of years ago.

Percolating water from rain and melting snow carries tons of gypsum, in solution, from the mountains into Lake Lucero each winter. Underground water also dissolves gypsum from the beds beneath the valley floor. During much of the year, cloudless skies and warm winds evaporate Lake Lucero and it shrinks to a crystal-encrusted marsh. Then the heat and wind draw the gypsum-laden underground water to the surface, where it evaporates, deposits its burden, and forms extensive gypsum flats. The persistent southwest wind picks up the particles of gypsum and whirls them away, eventually adding them to the snow-white sand dunes—the accumulation of centuries. Thus the dunes are ever-growing and ever-changing.

They are also ever-moving. Like all sand dunes, these are literally marching over the countryside. Prevailing winds blow grains up the gentle slopes. Upon reaching the dune crest, these grains fall onto the steeper leeward slope, thus building it up at the expense of the windward side. In the course of time, this process causes the crest and face



Yucca plant in bloom.

of each dune to move forward. The ripples that decorate the flatter dune surfaces are but small-scale examples of the same movement process.

Plants and Animals of the Desert

Because of the almost constant wind and the consequent gradual movement of the dunes, such plants as are able to establish themselves in the open spaces between the dunes eventually become covered.

Of the many species of plants found in the area, only a few are able to survive the irresistible march of the sand. Through a rapid elongation of their stems, the crowns ride the

The National Park System, of which this area is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.

crests of the rising dunes. When the dunes continue onward, they gradually recede and leave the plants behind them elevated on pillars of hardened gypsum bound by the roots. Plants with stems more than 40 feet long have been found.

Animals, also, have been affected by these surroundings. Such small creatures as lizards and mice were picked off easily by their enemies when conspicuous by their color. Through many centuries, only the lighter colored individuals have survived, and in this manner pale forms have evolved.

Of especial interest to scientists are the pocket mice. Among the dunes live white pocket mice; in the nearby red hills these mice are of reddish color; while another variety with almost black fur is found in the beds of black lava a few miles north.

Region Rich in Indian, Spanish, and Early-American Lore

Campsites of prehistoric Indians, identified by arrowpoints and other artifacts, have been found near the sand dunes.

Remains of an ancient two-wheeled wooden cart, probably an early Spanish carreta, were laid bare by the shifting of a dune.

Fights between Apaches and United States Army troops occurred in Dog Canyon, about 20 miles east of the monument.

Several historical novels have been written about early-day events in the Tularosa Basin. Eugene Manlove Rhodes, author of many popular westerns, based his stories on his experiences in this part of New Mexico.

The Monument Museum

The fascinating tale of the White Sands and how they originated is told through the use of photographs, paintings, and models in the small museum in the monument headquarters building.

The Monument

White Sands National Monument, with over 140,000 acres of Federal lands, was established by Presidential proclamation in January 1933.

All plants and animals in the monument are protected and must not be disturbed or harmed. Help keep the sands clean by using the fireplaces and refuse containers.

VEHICLES ARE RESTRICTED TO ROADS AND PARK AREAS—IT IS DANGEROUS TO DRIVE ON THE SAND DUNES.

Monument headquarters and museum.

