

NATIONAL MONUMENT

NEW MEXICO

WHITE SANDS



NATIONAL MONUMENT



United States Department of the Interior Douglas McKay, Secretary

National Park Service, Conrad L. Wirth, Director

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

A portion of the largest of rare gypsum deserts, the White Sands in Tularosa Basin, N. Mex., is included in White Sands National Monument. Its snow-white glistening "sands," deposits of wind-blown gypsum, drift into huge dunes. Sparsely covered with a variety of plant growth at its fringes, much of this wide sea of dunes is almost bare of vegetation. A few species of plants, exhibiting remarkable adaptability to their peculiar surroundings, have been able to resist burial under the

ever-shifting dunes, and several types of animals demonstrate protective coloration in the pale, bleached appearance which renders them unnoticeable in their strange environment.

Here is a unique bit of America. The loveliness of its white and green, the cleanliness of its vast expanse, and its appeal to the lover of the unexplored mark it as an area which attracts those diserning travelers who would see Nature's masterpieces.

Sand dunes of pure gypsum encroaching upon the flats.



Sands Result of Ancient Earth Movements

Stretching north and south between two mountain ranges, the Tularosa Basin slopes gently from all directions, forming a great natural basin with Lake Lucero, at the southwestern extremity of the White Sands, constituting its

focal point.

The basin was formed by the settling of a huge block of a high plateau probably millions of years ago. This is indicated by the occurrence of thick beds of gypsum beneath the floor of the basin. Remnants of the same beds are found high above the valley floor, in the parts of the plateau that did not settle and which are now the mountain ranges flanking the valley. Gypsum is the mineral from which plaster-of-Paris is made. Its massive translucent form is called alabaster. Percolating waters from rains and melting snows carry tons of gypsum in solution from the mountains into Lake Lucero each winter, while underground waters dissolve gypsum from the beds beneath the valley floor. For months each year, cloudless skies and warm winds evaporate the water.

Lake Lucero shrinks to a crystalencrusted marsh, and the gypsumimpregnated underground waters are drawn to the surface where they deposit their burden, forming extensive alkali flats. The ever-active southwest wind picks up the particles of gypsum left by the evaporat-



Yucca plant in bloom.

ing water and whirls them away to join the accumulations of centuries—the dunes of snow-white sand. Thus the dunes are ever growing, ever moving, ever changing.

Plants and Animals Adapted to Strange Conditions

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

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.

march of the sand. Through a rapid elongation of their stems, the crowns ride the crest of the rising dune. Plants with stems more than 40 feet long have been found. As the dune, continuing onward, gradually recedes in height, occasional plants are left behind elevated on pillars of hardened gypsum bound by the roots.

Animals, as well as plants, have become altered in the long process of accommodation to the unique surroundings. Such small creatures as lizards and mice would be, if of normal coloration, so conspicuous against their white background that they would be picked off easily by their enemies. Through many centuries, only the lighter colored individuals have survived, and in this manner pale forms have evolved. The white pocket mice of the sands are of especial interest to scientists because, in the nearby red hills, pocket mice of reddish color are found, while in the beds of black lava, a few miles north, the pocket mice have dark, almost black fur.

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 twowheeled 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.

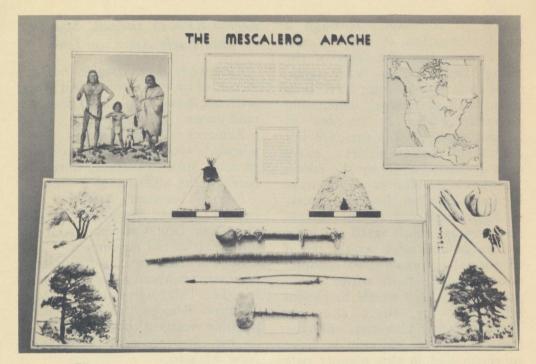
Several historical novels have been written about early-day events in the Tularosa Basin. Eugene Manlove Rhodes, author of many popular westerns, based his stories on his experiences in this part of New Mexico.

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.

Monument headquarters and museum.





An Indian exhibit in the museum.

The Monument

White Sands National Monument, comprising 140,247 acres of Federal lands, was established by Presidential proclamation in January 1933.

A 15-day permit fee of 50 cents for each automobile, motorcycle, and house trailer is collected at the entrance. An annual fee of \$1, which is good for the calendar year issued, may be purchased instead.

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.

Location

The monument is in south-cen-

tral 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.

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 gasoline and oil, 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.