

PO Box 1086 Holloman AFB, NM 88330

Phone 575-479-6124 www.nps.gov/whsa

## **Monument Statistics**

#### Managment

- In 2015, 497,506 visitors to White Sands National Monument spent \$25,729,300 in communities near the monument. That spending supported 387 jobs in the local area and had a cumulative benefit to the local economy of \$29,352,100.
- White Sands National Monument is the most visited NPS site in New Mexico, visited by around 500,000 people each year.
- •Annual Budget: \$1,607,600 base budget in Fiscal Year 2016.
- •The monument employs approximately 15 permanent, 3 term, and about 10 seasonal employees.
- •50 volunteers donated more 10,000 hours in fiscal year 2016 to the monument.

#### Infrastructure

- •1 backcountry campground with 10 sites, recording approximately 4,000 campers in fiscal year 2016, 3 picnic areas, and 5 hiking trails representing about 9 miles (14.5 km)
- •8 structures including the visitor center and seven adjacent buildings were officially designated as the White Sands National Monument Historic district in 1990.
- •The visitor center building complex is an excellent example of Spanish pueblo-adobe ("Pueblo-Revival") architecture constructed during the years of the Great Depression. Built by the WPA and CCC, construction began in 1936 and was completed in 1938 at a cost of \$31,600 (value 1938 dollars).

# Landscape & Geography

- White Sands National Monument is 224 sq. mi (360 sq. km or 143,733 acres). The dunefield is so large it can be seen from space.
- •Size and dimensions of the gypsum dunefield in the Tularosa Basin:

176,000 acres = 275 sq. mi = 442 sq. km 10 x 30 mi = 16 X 48 km

• Percentage of dunefield within the monument:

41% of the entire dunefield is protected by the monument, which is equal to: 115 sq. mi = 185 sq. km = 73,600 acres

- •59% of the dunefield is on White Sands Missile Range.
- •Highest point in the monument is 4116 ft. or 1,255 m above sea level (asl) at NE 30, which is a former military installation.
- •Lowest point in the monument is 3887 ft. or 1,185 m asl at Lake Lucero.
- •Depth of gypsum sand across the entire field is 30 ft. (9 m) below interdunal surface.
- The highest dunes are approximately 60 ft (18 m) high.
- •The dunefield has about 4.5 billion tons of gypsum sand, which is enough to fill 45 million box cars—a train long enough to circle the earth at the equator over 25 times!
- •When filled with water, Lake Lucero covers approximately 10 square miles (16 sq. km) at a depth of two or three feet.

#### Research

- •White Sands National Monument is currently the research site for 14 active permits and over 30 non-active permits providing data for projects still in progress.
- •Researchers at White Sands National Monument are studying topics such as:
  - -Adaptation of animals to living in the white dunes, including comprehensive studies of lizards, moths, plants, and mammals.
  - -Wind and weather patterns within the monument, and its effect on dune movement, sand transport, and dust storms.
  - -The formation and movement of dunes using LiDAR and other remote sensing technologies.
  - -Hydrology and groundwater movement within the monument and its role in the creation of gypsum and stabilization of the dunes.
  - -The formation of gypsum and other evaporite minerals that make up the dunes within Lake Lucero and Alkali Flats.
- Universities, agencies and NGO's conducting research at White Sands National Monument include: Yale University, West Virginia University, United States Geologic Survey, New Mexico State University, University of California at Berkeley, University of Arizona, and several others.

## Plants & Animals

- •Over 300 plants, 250 birds, 50 mammals, 30 reptiles, 7 amphibians, and 1 fish species call White Sands National Monument their home.
- White animal species found in the monument include 3 reptiles, 1 amphibian, 3 mammals, and numerous insects.
- •At least 45 species are endemic, meaning they are only found at White Sands and nowhere else on earth. These include: Apache pocket mouse, White Sands wood rat, bleached earless lizard, two camel crickets, and 40 species of moths.

### **Paleontology**

- •In 1932, large tracks, approximately 22 X 10 inches (55 X 25 cm) were discovered on the Alkali Flat.
- Further investigation in 1981 identified tracks of mammoth, ancient camel, and an undetermined mammal.
- •Thousands of prints have been found from dire wolf, saber tooth cat, mammoth, giant camel, and ground sloth. In 2014, the monument was officially designated as a megatrack site, protecting the most extensive Late Pleistocene megatrack site in North America.

#### Cultural History

- •The monument preserves over 10,000 years of human history.
- •Over 4,000 thousand gypsum hearth mounds, unique to White Sands, are found throughout the dunefield.
- •Along the western shore of Lake Lucero dense cultural material including burial sites, pot shards, lithics, manos and matates, beads, and hearths represent the significance of the area to people such as the Jornada Mogollon who lived in the basin from 200 AD 1350 AD.
- •On July 16, 1945 the first atomic bomb was detonated at the Trinity site, located about 100 miles (259 km) north of the monument.

