

# Bilby Crater

## Bilby Nuclear Test

The Bilby nuclear test was part of the United States' Niblick nuclear test series, a group of 41 nuclear tests conducted 1963-1964.

Detonated on September 13, 1963, Bilby's 249-kiloton detonation was one of the largest on Yucca Flat, and was the first underground test to be felt by a large number of people in Las Vegas, roughly 65 miles away. It was fired 2,400 feet underground in volcanic rock, and produced a subsidence crater approximately 1,800 feet wide and 80 feet deep.

## Subsidence Crater

A subsidence crater is a hole or depression left on the surface of an area that has had an underground explosion. The underground explosions create spherical cavities filled with hot gases. As those

gases cool, the air pressure within the cavity falls, causing it to collapse and creating a crater above the cavity as earth falls to fill the depressurized pocket.

## Bilby Crater Today

Today, Bilby Crater is used for a number of purposes. Participants of Nevada National Security Site tour groups travel through it as part of their Site experience. The Department of Energy collects geological, geophysical, and hydrological data from the crater and the surrounding area for use in groundwater survey projects. And in one area, where NASA once sent astronauts to train for the Apollo 11 moon landing mission, a solar array now generates power for a nearby air monitoring station.



*The Bilby Crater as seen on the Nevada National Security Site public tour.*