

Desert Biome

by Nathan Shepard

A biome is a major regional biotic community, such as a grassland or desert. A desert biome is an area that receives less than 25cm of rainfall per year. Deserts have exotic and surprising climates, plants, and animals.

Deserts are formed when mountains cause inland-bound clouds to drop their moisture; hence, there is none left for the area beyond the mountains, the desert. There are two radically different desert climates, hot and cold. Hot deserts have incredible temperatures, often up to 130°F during the day and down to freezing at night. The Sahara is an example of a hot desert. It is as big as the United States, and it is growing larger due to increasingly dehydrating conditions. Cold deserts, such as the Gobi desert in China, range in temperature from 10° in winter to 70° in summer. Though the two climates seem to be opposites, both lack rain. Rain rarely falls in the desert, but when it does, the dry, parched ground cannot absorb the sudden onslaught of water, so furious flash floods are a common occurrence. These floods are raging and deadly, consuming anything in their paths, but they do bring life and renewal to the scorched earth.

The ability to live in these severe conditions is what makes desert plants fascinating. In a desert, rainfall supplies plants with gallons of water once or twice a year but none in between; therefore, they have to store it when it is available. Commonly, plants hold water using widespread roots and thick fleshy stems. Cactus plants, for example, store their water in their pith and other tissues and then protect it behind sharp needles. Contrary to common opinion, there exists a wide variety of plants living in the desert including the resurrection plant, a variety of spiked moss, sagebrush, agave, and spanish bayonet.

Together with various species of plants, animals that need little water to survive such as rodents, snakes, foxes, coyotes, birds, and insects are often found in the desert. The camel can go without water for ten days by using water stored in its hump. Small desert animals become nocturnal to escape the heat and avoid losing water through perspiration. Lizards such as the gila monster, birds such as the lark, the rattlesnake, and many other kinds of snakes have their own unique ways to escape the sun and store water. Besides storing water, many of these animals burrow underground during the day to escape the blistering sun. The temperature underground can be up to 30° cooler than the scalding sand on the surface.

Deserts are full of unexpected life and surprising growth in the midst of some of the world's harshest climates. In spite of their dry, harsh appearance, deserts are still full of activity. All biomes are unique, but deserts are unusually, ruggedly, beautiful.