

Topic: The Hot Desert Biome-

Desert biomes are incredibly interesting to look at. They cover about 20% of the Earth and occur where rainfall is less than 50 cm/year. There are mainly four types of deserts in this biome – hot and dry, semiarid, coastal, and cold. These are identified by the fact that they don't get a lot of precipitation during the year. Only those plants and animals that are able to adapt to the climate and temperature of desert can survive there. Deserts that receive rain as the main form of precipitation are called as hot deserts while those which receive snow as their main form of precipitation are called as cold deserts.



There are four major types of deserts:

- Hot and dry
- Semiarid
- Coastal
- Cold

The Hot Desert Biome are the stereotypical deserts that many of us think about when we're talking about the word "desert." Here are some of the main traits that you will notice when you're exploring a hot and dry desert:

- **Location-** Between 15° and 35° latitude (North and South of the equator); examples are Mojave, Sonoran, Chihuahuah, and Great Basin (North America); Sahara (Africa); Negev (Middle East); and Gobi (Asia). Hot and dry deserts can be found in North America, Central America, South America, southern Asia, Africa, and Australia. Well-known hot and dry deserts include the

Mojave and the Sahara. As the name suggests, these deserts are very hot and very dry. They have two seasons: hot and hotter!

- **Climate-** The characteristics of hot deserts include high temperatures in summer; greater evaporation than precipitation, usually exacerbated by high temperatures, strong winds and lack of cloud cover; considerable variation in the occurrence of precipitation, its intensity and distribution; and low humidity. Desert biomes are the driest of all the biomes. In fact, the most important characteristic of a desert is that it receives very little rainfall. Most deserts receive less than 300 mm a year compared to rainforests, which receive over 2,000 mm. That means that the desert only gets 10 percent of the rain that a rainforest gets! The temperature in the desert can change drastically from day to night because the air is so dry that heat escapes rapidly at night. The daytime temperature averages 38°C while in some deserts it can get down to -4°C at night. The temperature also varies greatly depending on the location of the desert.
- **Vegetation-** Since desert conditions are so severe, the plants that live there need to have adaptations to compensate for the lack of water. Some plants, such as cacti, store water in their stems and use it very slowly, while others like bushes conserve water by growing few leaves or by having large root systems to gather water or few leaves. Some desert plant species have a short life cycle of a few weeks that lasts only during periods of rain.
- **Animals-** Animals of all types live throughout the region (insects, mammals, arachnids, birds, reptiles). Carnivorous animals are common due to the lack of plant life in the hot and dry desert. They mostly stay inactive in protected hideaways during day when it is too hot and come out at night when it is a little cooler.
- **Soil-** Soil is very rocky, coarse, and/or filled with gravel. Because of this, water drains incredibly well and won't stick around below the surface.