















Desert plants have developed amazing ways to survive the very dry conditions of deserts.

Drought-resistant plants are known as xerophytes. Many xerophytes are succulents. This means that they can store water in their tissue. Cacti, for example, absorb large amounts of water following rainfall. Their fleshy stems swell up, then slowly shrink as water is lost through transpiration (the loss of water through leaves). Many succulents also reduce water loss by only transpiring at night.

Most desert plants have small thorny or waxy leaves. This reduces the loss of water through transpiration. Desert plants also have very long root systems. This allows them to take in any water available. Some plant store water in bulbs in attached to their roots.

Ephemeral desert plants burst into life following rain. Their entire life-cycle is short and seeds lay dormant in the soil until it rains again.





Animals have adapted to the dry conditions of the desert environment in many amazing ways.

Unlike the camel, most of the animals of the desert are small and nocturnal. which keeps heat gain and loss to a minimum. Most avoid the head by hiding in burrows or under rocks by day and being active during the night or early morning. Insects and reptiles have thick outer coverings so that they lose as little water as possible through evaporation. Some desert animals become dormant (or inactive) during periods of extreme heat or drought.

A woolly coat on the upper part of its body, which provides good insulation from the sun-

Fat reserves stored in the hump can keep the camel alive when there is no food available

Dry dung, which ... reduces water loss

Able to carry large amounts of water (equal to about 25 percent of its body weight) in its stomach Nostrils that can be closed during sandstorms

A leathery mouth that enables it to eat thorny desert plants

Able to survive wider variations in body temperature ----- than any other mammal

... Two toes joined by a web of tissue, which stops it from sinking in the sand

 No wool on the underside of its body, which allows for heat loss





Cold deserts (light red)



