Nelson

# PM

Deserts are the driest places on Earth. They receive very little rainfall and are usually extremely hot during the day and cold at night. Deserts are home to plants, animals, insects and microscopic life such as bacteria. These living things have adapted to survive in extreme conditions and with little water.





# Desert Life

**Carmel Reilly** 

# Desert Life

### **Carmel Reilly**

## Contents

Desert Life	2
Deserts as Homes	2
Life in Arid Deserts	4
Life in Semi-Arid Deserts	12
Life in Coastal Deserts	20
Life in Polar Deserts	
How a Desert Ecosystem Works	
Living Deserts	30
Glossary	31
Index	

# Desert Life

## **Deserts as Homes**

Deserts are places that have low rainfall, extreme temperatures and rocky or sandy soils.

There are four main types of deserts:

- arid deserts, which are hot and dry
- semi-arid deserts, which have higher rainfall than arid deserts
- · coastal deserts, which are near the sea
- polar deserts, which are usually covered in snow and ice.

Deserts cover about 30 per cent of Earth's land.

Although desert environments are usually dry and bare, they are home to many types of living things. These include plants, **fungi**, animals, insects and **microscopic** life such as **bacteria**. Over thousands of years, these have been able to adapt, or change, to survive the harsh desert conditions.

Living things are also able to survive by forming **ecosystems**, where they work together to provide food and shelter for each other within the desert landscape.

> Rainfall is measured in millimetres. It tells the average depth of the rainwater that fell on every part of the ground.

Coastal deserts, such as the Atacama Desert in Chile, are found where the land meets the ocean.

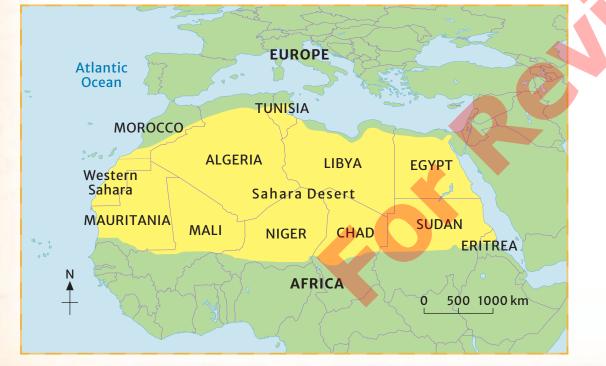
an arid desert 🔛

#### Life in Arid Deserts

Arid deserts are found in Africa, Australia, Central Asia and North and South America. Arid deserts are harsh environments where less than 250 millimetres of rain falls each year. In contrast, non-desert environments receive 600–1100 millimetres of rainfall a year.

### At Home in the Sahara Desert, North Africa

The Sahara Desert is the largest arid desert in the world. It covers almost a third of the African continent. Despite its extreme conditions, the Sahara is home to hundreds of **species** of plants and animals that have adapted to the dryness and heat.



#### Date Palm

The date palm is a type of tree that grows well in this hot environment. Date palms have long roots, which allow them to suck moisture from deep in the ground. Their tall, thin trunks allow for air to move around them and keep them cool. The curved branches and thick leaves of date palms also give shade to their trunks and stop them from being burnt by the sun.

date palms in the desert in Tunisia

#### Sahara Desert Key Facts

Area: approximately 9 000 000 square kilometres
Average temperatures: 36 degrees Celsius in summer;
13 degrees Celsius in winter
Average rainfall: 76 millimetres per year

#### **North African Ostrich**

The North African ostrich can live for weeks in the Sahara Desert without water. Most of the moisture it needs to survive comes from the food it eats. It has a long, bare neck and long legs, and can raise its feathers away from its body. These features allow air to flow around its body and help to keep it cool. When it is windy in the desert, the ostrich's three eyelids and thick, feathery eyelashes protect its eyes from the desert sands.

feathery eyelashes\_

A North African ostrich paces through the desert.

#### **Fennec Fox**

Fennec foxes avoid the daytime heat in the desert. During the day, they sleep in burrows that they dig in the sand, and they go hunting for food only in the evening when it is cooler. They do not need to drink a lot and can get most of the water they need from their diet of small animals and plants. Fennec foxes have fur on the pads of their feet, which helps to protect them from the scorching desert sand.



Fennec foxes hunt in the cool of the evening.