

# Explore Polar Climates



Canada and some parts of Asia and Europe are cold forest areas that have short summers and long cold winters.

Temperatures range in the winter from -65 to 30F (-54 to -1C) and in the summer from 20 to 70F (-7 to 21C).

The vegetation there is made of many coniferous trees (with needles) such as pine trees (like Christmas trees). This type of vegetation is called the Taiga.

Life in the Taiga is cold and snowy; food is hard to find especially in the winter.

The Canadian goose, ermine, weasel, howl, moose, red fox and wolverine are typical animals that live in these areas.

Summers are rainy, warm and humid.

Yearly precipitations are between 12 and 33 inches (30-85 cm).

Animals and plants have adapted to the four seasons of the temperate forests: winter, spring, summer, and fall.

# Explore Desert Climates



**Deserts** represent one-fifth (20%) of the land surface of the world.

The majority of deserts are in the Arabian Peninsula, Australia, The Americas, North and South Africa, India and Pakistan.

The largest desert is the Sahara, in North Africa, and is about 3,500,000 square miles.

Deserts are characterized by extreme heat and dryness, very hot in the daytime and chilly or even cold at night.

The average temperature is 100 degrees during the day and below 50 degrees at night.

The wettest desert does not get more than 10 inches of rain a year.

A variety of plant and animal species live there, thanks to their power to adapt to the harsh environment. Camels, for example, are able to store large quantities of water in their humps.

Animals like rattlesnakes and scorpions spend most of the day underground but come out at night to eat and hunt.

Spade foot toads spend 9 months of the year underground.

Deserts often get their names like "Death Valley" or "The place from where there is no return" because of their extreme conditions

# Explore Moderate Climates



**Temperate forests** can be found in the USA, Canada, Europe, Russia, China and Japan.

The average yearly average temperature in these forests is about 50F (10C). Rainfall is between 30 to 60 inches per year (75 - 150 cm).

Because little water is available in the winter, trees lose their leaves and photosynthesis stops.

These forests are called "Deciduous," because the leaves of the trees change color in autumn and fall in the winter, to grow back in spring.

In the fall, forests are beautiful as they change colors from green to orange and sometimes red, such as Oak trees.

Most animals living in these forests adapt to the cold winters by hibernating or migrating to warmer areas.

The black bear is a typical hibernating animal, which thrives in the summer and fall months.

Deer, squirrels, howls, raccoons, porcupines, and turkeys are common animals of the temperate forest.

# Explore Tropical Climates



**Tropical rainforests** are also known as equatorial: they are located near the equator.

Brazil has the largest tropical rainforest (The Amazon), others are in Southeast Asia, the Pacific Islands, and Western Africa.

Temperatures average between 70-85F (21-29.5C). These areas are warm all year long.

Tropical areas cover 6-7% of the Earth's surface.

Having an average of 400 inches per year, rainforests are a perfect place for trees and plants to grow.

Cacao and Coffee, as well as Lianas are products that come from these areas.

Bamboo, Bananas, Sugar Cane, Rubber, Ginger, and Black Pepper are all native of these regions.

Because of the dense and diversified vegetation a great number of animal species can be found in the rainforest.

Many different types of birds (such as the Blue Bird of Paradise) and insects (such as the Flying Dragon) live only in the rainforest.

Many primates such as the Orangutan, the Gorilla, and the Chimpanzee live there.

The rainforest is also a dangerous environment with many poisonous snakes, such as the Vine snake.