

B B C BITESIZE

An ecosystem is a community of organisms that interact in a particular environment.

A biome is a large-scale ecosystem containing plants, animals and organisms which have adapted to a similar climate.

The UK is part of the temperate deciduous forest biome.

Within this biome we have a mild climate, not too hot or cold and plenty of rain. As a result, this can support a lot of different ecosystems. Deciduous forests, grasslands, wetlands, heaths and moors.

A striking contrast to the UK is the tundra biome found in Iceland.

This is a very cold biome which makes it difficult for plants to grow.

A warmer comparison with our UK biome is the hot savannah grasslands. Here you're more likely to find drought resistant plants.

The distribution of biomes is largely dependent on latitude because latitude determines the climate. Being further away from the equator means less solar energy and lower temperatures.

Global atmospheric circulation is key here. At the equator, warm, moist air rises which drives atmospheric circulation and creates rain to support rainforests. Then at the poles, cold, dry air sinks and creates the tundra.

Ocean currents also play a role leaving warm and cool water around the globe.

Local factors which control biome distribution include wind, soil type, sunlight, water and height of land.

So we've seen there are various factors locally and globally that influence the location and types of biomes and ecosystems.

And that overall, climate is the main factor which is controlled by latitude.