

Environmental Change



Animals are adapted to suit their environment, helping them survive and reproduce. However, if the environment changes, they may no longer have this advantage.

A change in environment can cause **extinction**. Extinction is when the last individual of a species dies.



When a species is at risk of extinction, it is **endangered**. Over 1,100 animal species and over 700 plant species are classed as endangered or threatened.



Why is important to conserve species?

Extinction can cause a decrease in **biodiversity**. Biodiversity is the number and variety of organisms found in an area.

Conserving biodiversity is important because every living thing plays a vital role in an ecosystem. If one species becomes extinct, this can have a huge impact on the rest of the community.



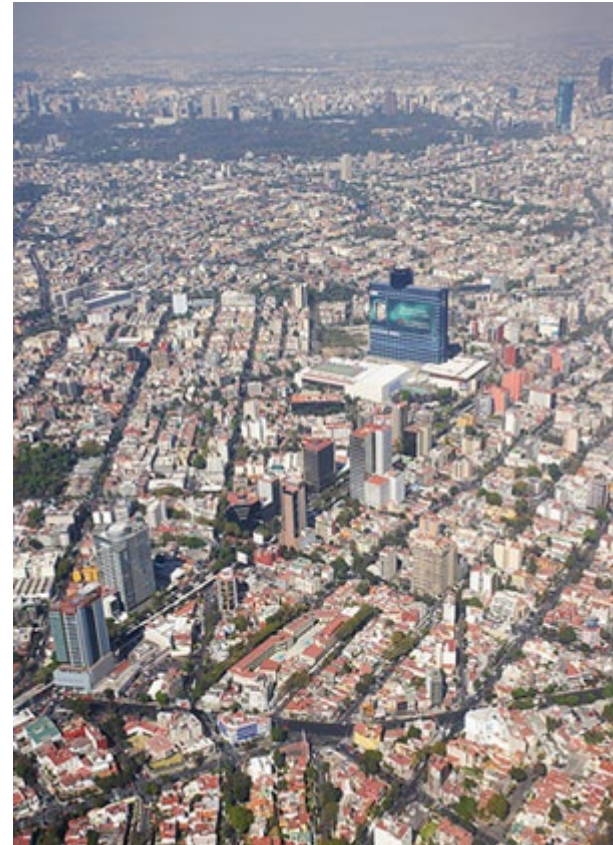
Extinction can also decrease the resources available to humans. For example, some medicines are made from plants – if a plant species becomes extinct its unique chemicals are no longer available to us.



Extinction can occur naturally. However, human impact on the environment can also cause species to die out.

Human activity can cause damage to the environment in several different ways:

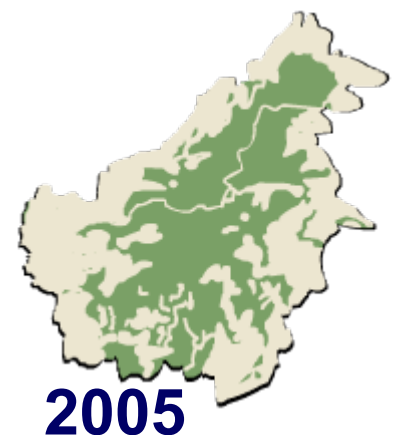
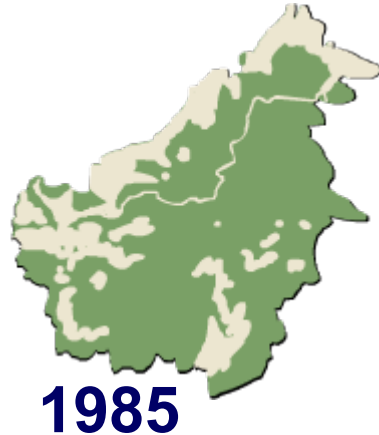
- destruction of natural habitats
- over-hunting
- climate change
- pollution.



Humans often destroy forest habitats to make room for housing or industry. This is called **deforestation**.

If a woodland habitat is destroyed, some animals may no longer have resources they need, e.g. food and shelter. Species that aren't able to survive outside of their natural environment may become endangered.

In Borneo, southeast Asia, forests are slowly being removed to make way for other crops.



Human activity may be causing a change in the world's **climate**.

The production of carbon dioxide and other heat-trapping gases from the burning of fossil fuels may be causing the earth's climate to change. This is called the **greenhouse effect**.

This change in the earth's climate could result in:

- higher global temperatures
- sea level rising
- a different geographical distribution of rain fall.





How could climate change affect ecosystems?



A change in the climate could have a huge impact on animals and plants.

Click on each category to find out more about the possible effects of global climate change.



habitats

food chains

seasons

migration

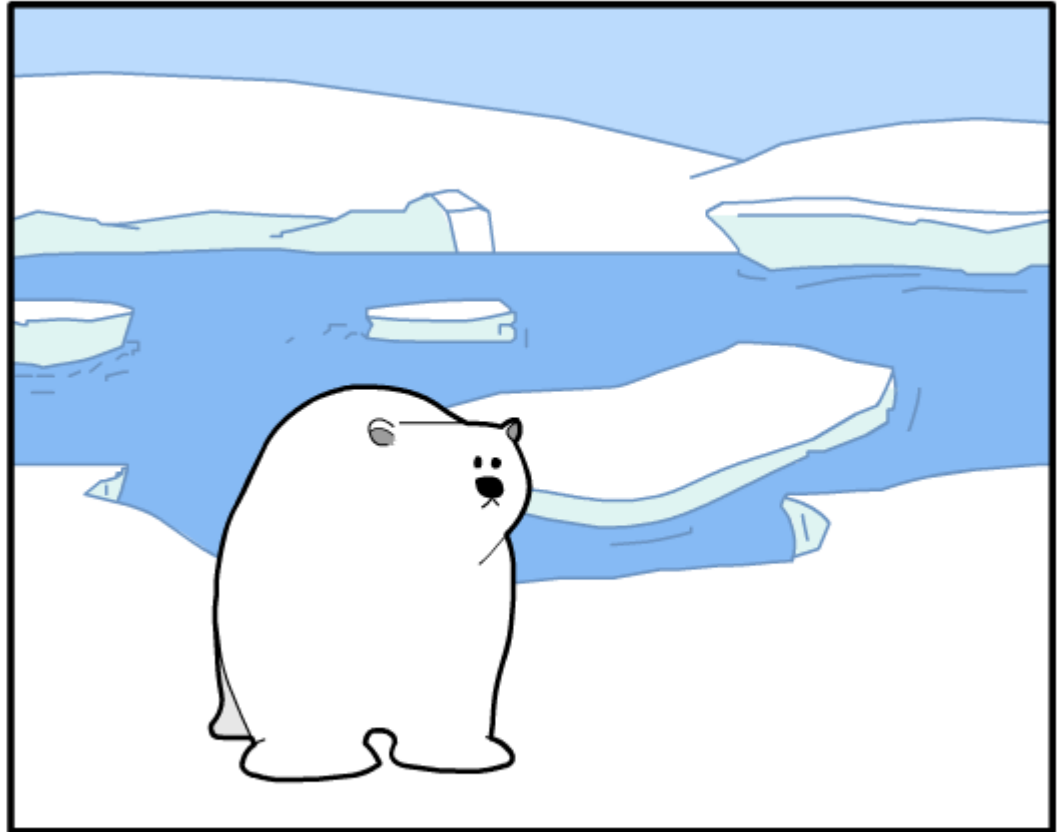
crops



How could global warming affect polar bears?

A change in the global temperature could have an impact on polar bear populations.

Click "**play**" to find out more.



Extinction due to climate change

If climate change causes an impact on habitats and ecosystems, this could result in more species becoming extinct.

It is thought that **20–30%** of species are likely to be at risk of extinction if the global average temperature rises by 1.5–2.5 °C beyond 1990 levels.



What evidence is there that global temperatures are rising?





How has temperature changed compared to the 1961-1990 average?

