

# AQA Biology GCSE

## 7.3 - Biodiversity and the Effect of Human Interaction on Ecosystems

### Flashcards

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# What is biodiversity?



## What is biodiversity?

The variety of the different species on earth or within an ecosystem.



# What is the importance of biodiversity?



What is the importance of biodiversity?

To maintain the stability of an ecosystem.



How does biodiversity ensure the stability of an ecosystem?



## How does biodiversity ensure the stability of an ecosystem?

It reduces the dependence on particular species for resources eg. food and shelter, so that even if one species is removed other species can still survive.



Why have humans' consumption of resources and waste production increased?





# Why have humans' consumption of resources and waste production increased?

- Rapid rise in human population
- Increase in standard of living



# Where does pollution occur?



# Where does pollution occur?

- Air
- Land
- Water



State an example of water pollutants.



State an example of water pollutants.

- Sewage
- Fertiliser
- Chemicals



# How does eutrophication occur?



## How does eutrophication occur?

Fertiliser from farms pollute the water, causing excessive algae growth, depleting the oxygen in the water, causing other plants and animals to die.

Dead plants are decomposed by bacteria and the oxygen level decreases further.



State an example of air pollutants.





State an example of air pollutants.

- Smoke
- Acidic gases



State an example of land pollutants.



State an example of land pollutants.

- Landfill waste
- Chemicals



Which human activities reduce the land available for animals and plants?



Which human activities reduce the land available for animals and plants?

- Building
- Farming
- Quarrying
- Disposing of waste



# Why have peat bogs been destroyed?



Why have peat bogs been destroyed?

To produce compost to increase food production.



Why does the destruction of peat bogs greatly contribute to the greenhouse effect?





Why does the destruction of peat bogs greatly contribute to the greenhouse effect?

Peat bogs are stores of carbon (carbon sinks) and burning them releases a large volume of carbon dioxide into the atmosphere.



# Why have large-scale deforestation activities occurred?



## Why have large-scale deforestation activities occurred?

- To provide land for cattle or rice fields
- To grow crops to produce biofuels



# What is the greenhouse effect?



## What is the greenhouse effect?

Greenhouse gases trap energy from the Sun as heat in the atmosphere, keeping the temperature on earth suitable for life.



# What is causing global warming?



## What is causing global warming?

The increase in levels of greenhouse gases eg. carbon dioxide and methane, causing the temperature on earth to increase.



# What are the harmful effects of deforestation?





## What are the harmful effects of deforestation?

- Destruction of many animals' habitats
- Releases large amounts of greenhouse gases



State the consequences of global warming.



## State the consequences of global warming.

- Rising sea levels
- Melting polar ice caps
- Changing weather patterns
- Migration of animals to find suitable habitats
- Tropical diseases becoming more common
- Extinction of species



Describe the steps taken to maintain biodiversity.



## Describe the steps taken to maintain biodiversity.

- Breeding programmes for endangered species.
- Protection and rebuilding habitats.
- Replanting field margins and hedgerows.
- Reduce deforestation.
- Reduce carbon dioxide emissions.
- Recycling rather than disposing in landfills.



What is the purpose of replanting hedgerows and field margins?



What is the purpose of replanting hedgerows and field margins?

There is higher biodiversity in the margins than the fields that they surround.

