

## Biodiversity

reasons why maintaining biodiversity is important

- new drugs can be discovered
- use to improve characteristics of crop plants and farm animals which make food for us
- moral obligation to not cause extinction
- everything has a right to live
- aesthetic appreciation of the beauty of nature

consequences of climate change

- mean temp is rising due to increased levels of CO<sub>2</sub> and methane

Biodiversity of plants and animals

- loss of species in colder conditions
- increases in species adapted to warmer conditions

Agriculture

- different crops having to be grown
- staple crops affected resulting in food shortages
- plant diseases spread in warm wet conditions

Diseases

- malarial mosquitos invade Britain
- pathogens grow more rapidly in warmer conditions

Conservation of endangered species

In situ- the natural habitat

- habitat protection
- prevention of hunting
- preventing endangered plants being dug up
- excluding farm animals
- local people as wardens
- help to local people to protect crops and farm animals

Ex situ- not in natural environment

- in zoos or botanical gardens
- captive breeding, allows genetic diversity, eggs can incubated young hand reared
- botanical gardens use seed banks which can maintain genetic diversity easily transported and used for selective breeding. stores seeds from all around the world for hundred of years

International conservation

CITES- the convention on international trade in Endangered species

145 countries signed up, decides what species can be traded and how many

Problems

- high prices for illegal trade
- cost of checking exports
- identification of plants and animals and their products that are traded

Rio convention on biodiversity

each country is committed to developing national strategies to protect its biodiversity apply to SSSIs

Environmental impact assessments

carried out before any new development

works out the likely impact on local species

environmental consultants survey the site and surrounding area for any rare species

develop ways to protect these species if present

#### Problems

- high costs for investigation
- paid by developer
- cheaper consultants less likely to find problems
- planning permission without full facts being known