

Conservation

Revision notes • What endangered and extinct mean, the causes of endangerment and extinction, and how endangered species can be conserved.

For Cambridge IGCSE Combined Science 0653. **Supplement** is Extended content, only examined on Papers 2 and 4.

Conservation Spec B16.2

Endangered species and how to conserve them Spec B16.2.1, B16.2.2

An **endangered** species is at risk of dying out. A species is **extinct** when no individuals are left alive anywhere.

Why organisms become endangered or extinct

Causes of endangerment and extinction

Cause	Explanation
Climate change	Habitats change too quickly for species to adapt or move
Habitat destruction	Loss of food, shelter and breeding sites
Hunting	Animals are killed for meat, fur, horns or tusks faster than they reproduce
Overharvesting	Plants or animals are collected or caught faster than they can be replaced
Pollution	Poisons or waste make habitats unsuitable or kill organisms
Introduced species	A non-native species may compete with, prey on or spread disease to native species

Supplement

How endangered species can be conserved

Supplement

- **Monitoring and protecting species and habitats:** populations are counted, and reserves and laws protect the animals and their habitats.
- **Education:** people are taught why species matter, so they support conservation.
- **Captive breeding programmes:** animals are bred in zoos and reserves, and young may be released into the wild.
- **Seed banks:** seeds of rare plants are stored at low temperature so that plants can be grown later if the wild population dies out.

Common mistake: Captive breeding programmes alone do not save a species. The habitat must also be protected so that the animals can be released.

Quick check

1. Give four reasons why species become endangered or extinct.
2. **Supplement** What is a seed bank?

Quick check answers

Conservation

- 1 . Any four of: climate change, habitat destruction, hunting, overharvesting, pollution, introduced species.
- 2 . A store of seeds from rare plants, kept so that the plants can be grown again if wild populations are lost.