

This is the **Higher Separate** version — includes all Higher Tier content (marked ★) and all Separate Science content.

Human activities threaten biodiversity at an unprecedented rate. Conservation measures aim to protect species and habitats.

- Threats: habitat destruction, deforestation, pollution, climate change, overexploitation, invasive species
 - Deforestation consequences: CO₂ release, habitat loss, soil erosion, reduced rainfall
 - Global warming: CO₂ and methane → enhanced greenhouse effect → rising temperatures
 - Conservation: nature reserves, breeding programmes, seed banks, sustainable fishing, reforestation, international agreements
 - Eutrophication: fertilisers → algae → blocks light → plants die → bacteria use O₂ → fish die
- ★ **HT Evaluate:** nature reserves protect habitat but may be too small; international agreements reduce emissions but difficult to enforce

Key Terms

Biodiversity	Variety of species in an area
Global warming	Rise in temperature due to enhanced greenhouse effect
Conservation	Protection and management of species and habitats

■ **Exam Tip:** Eutrophication chain: fertilisers → water → algae → blocks light → aquatic plants die → bacteria decompose → O₂ used up → fish suffocate. Every step needed.