

Ecosystems

Conserving Biodiversity

Section outline

Strategies to conserve biodiversity including a range from sustainable use to total protection through no access

Conservation issues including decisions on which habitats / species to conserve, and sources and types of funding

Terms

Conservation vs preservation:

“Conservation and preservation are closely linked and may indeed seem to mean the same thing. Both terms involve a degree of protection, but how that protection is carried out is the key difference. Conservation is generally associated with the protection of natural resources, while preservation is associated with the protection of buildings, objects, and landscapes. Put simply, *conservation seeks the proper use of nature, while preservation seeks protection of nature from use.*”

[US National Park Service (quoted in Wikipedia, 20/09/17)]

“Preservationists advocate for giving areas of nature and species a protected existence that halts interference from the humans. In this regard, conservationists differ from preservationists in the social dimension, as conservation biology engages society and seeks equitable solutions for both society and ecosystems. Some preservationists emphasize the potential of biodiversity in a world without humans.”

[Wikipedia 20/09/17]

Why conserve?

<https://ypte.org.uk/factsheets/biodiversity/why-do-we-need-to-conserve-biodiversity:>

- The more plant, insect and animal species there are in one area the greater the biodiversity and the healthier the ecosystem
- Biodiversity is of great importance in order to maintain stable ecosystems.
- Biodiversity and the protection of our ecosystems is also important to us all as individuals [as we] can all appreciate the beauty of biodiversity
- Many people feel that it is their duty to pass on the same natural world to their children that they have enjoyed.
- Some argue that species themselves have their own value and right to exist whether humans need them or not.
- Our landscapes also reflect our history and contribute to our sense of belonging and our natural world has inspired our imagination, poetry and art for thousands of years
- Many more medicines have been derived from species found in rainforest areas and it is possible that many species could hold the answer to future medical cures – so the more species that are conserved, the more chance there is of discovering something of medical value

Conservation strategies

Research examples of different strategies used to try to maintain biodiversity.

You need to know about:

- The concepts of *in situ* and *ex situ* conservation, and their pros/cons
- The International Union for Conservation of Nature (IUCN)
- Ramsar
- The SLOSS debate
- Whole ecosystem conservation vs. conservation of 'hotspots'
- Conservation through no access
- Sustainable use

Try to find examples of different strategies and assess how successful they have been in conserving biodiversity. What are the reasons for their success (or otherwise)?