

Introduction

What is biodiversity? Biodiversity, or biological diversity, is the whole variety of life on earth. This includes all species of plants and animals from commonplace grass species to endangered giant pandas; from microscopic plankton to huge whales. Biodiversity includes the diversity of habitats on Earth from mountain tops to deep oceans, meadows, wetlands and deserts and the variety within species.

The Scottish Executive places Scottish biodiversity as a key priority and has recently published a Scottish Biodiversity Strategy which aims to conserve and enhance biodiversity for the health, enjoyment and wellbeing of the people of Scotland. Biodiversity in western Scotland is considerable with an enormous number of individual species on land and in water and an incredible variety of habitats. The marine environment of western Scotland is an area of special importance. Many species are unique to this area and there are a very wide range of marine habitats. This is a significant area for whales, dolphins and porpoises and almost a third of the worlds species have been sighted in this region.

Why is it important? Biodiversity is essential because it impacts all of our lives. In understanding about biodiversity we will also understand more about ourselves, the world around us and the interrelationships between humans and the living planet; we will care about and more fully understand global environmental issues such as climate change. In the UK human activity is having a negative impact on biodiversity causing species decline and habitat loss. The need to restore the 'balance of nature' has never been so urgent. Through education there is hope of restoring this balance.

Anatole France: "Do not try to satisfy your vanity by teaching a great many things. Awaken people's curiosity. It is enough to open minds; do not overload them. Put there just a spark. If there is some good inflammable stuff, it will catch fire."

Meeting Eco-Schools objectives and learning outcomes: HWDT can help you meet Eco-Schools objectives and learning outcomes for biodiversity. We have created a range of resources, ideas and opportunities with Eco-Schools in mind. All classroom activities are designed to encourage active learning and to develop thinking skills including enquiry, problem solving and critical thinking. Many will also develop communication skills and creativity. Outdoor learning ideas and activities are also available here to support you in providing valuable first-hand learning experiences involving direct contact with nature. Additionally we have ideas of how schools can get involved in local projects to promote and improve biodiversity.

We hope that you will teach the next generation about the importance and value of biodiversity, especially marine biodiversity, at this critical time.



Teacher's additional information

If you are interested in finding out more information on marine biodiversity and gaining background knowledge to support your teaching of this topic, we hope that you will find these links and recommendations useful. This list is by no means exhaustive.

Books:

- Carwardine, M. 1995. Whales, dolphins and porpoises. Dorling Kindersley Handbooks. ISBN: 0-7513-2781-6
- Naylor, P. 2005 (2nd Edition). <u>Great British marine animals.</u> Sound Diving Publications. ISBN: 0-9522-8315-8
- A key to common seaweeds (2000). Morrell, S. Fields Studies Council.
- The rocky shore name trail: a key to common plants and animals of rocky shores (2000). Cremona, C., Simms, A. and Ward, M. Field Studies Council.

Resources:

Sea and Learn Pack from the Argyll and Bute Marine and Coastal Local Biodiversity
 Action Plan Partnership. Available to download in English and Gaelic at:
 http://www.argyll-bute.gov.uk/biodiversity/Publications.htm

Websites:

- Hebridean Whale and Dolphin Trust
- Marine Conservation Society
- Eco-Schools Scotland
- Argyll and Bute Biodiversity Partnership
- Biodiversity Scotland
- Field Studies Council