

BIODIVERSITY

Communications Toolkit

Life in the Sea

- The seas around Scotland support a varied and rich wildlife. The North Atlantic Drift brings warm waters to the west coast and cold sub-Arctic waters reach down to the Northern Isles, bringing together northern and southern marine species. The range of exposures to currents and wave action and the varied geology make Scotland's marine and coastal habitats among the most diverse in the world.
(Source: Scotland's Biodiversity Resource, www.biodiversityscotland.gov.uk)
- On the west coast of Scotland and on some of the larger islands grow ancient oceanic woodlands - so rich in species that these forests has been likened to that of temperate rainforest. Oak, birch, bird cherry, rowan, alder and many other familiar trees grow in these woods. But what is truly remarkable is the variety of mosses, liverworts and lichens which thrive in the moist, stable oceanic climate and the unpolluted air.
(Source: www.scotland.gov.uk/Publications/2004/05/19366/37243)
- In the clear waters around many of our west coast and islands can be found a rich and unusual habitat - several species of calcareous red seaweed (maerl) growing on the seabed. European maerl supports over 1,700 animal species and 300 seaweed species. A recent study of Scottish maerl beds found species previously unknown to science.
(Source: www.scotland.gov.uk/Publications/2004/05/19366/37243)
- In the deep waters to the west and north off Scotland are corals, growing on the seabed, in some cases in large reef-like colonies. The main species involved, *Lophelia pertusa*, is as beautiful and remarkable as many of its tropical relatives, and colonies support more than 800 animal species. Even more remarkable, it is thought to grow in water up to 3,000m deep. These reefs were being rapidly destroyed by deep water fishing trawls until fisheries control measures were introduced in 2003 to protect them.
(Source: www.scotland.gov.uk/Publications/2004/05/19366/37243)
- Fishing undoubtedly affects biodiversity. The North Sea has been intensively trawled for decades, and the range of sea bed creatures has been altered. Scavenging crustaceans and starfish have displaced bivalve molluscs and other long-lived species. Out of 21 commercially exploited fish stocks in 2003, 16 are currently considered to be fished beyond safe biological limits.
(Source: www.scotland.gov.uk/Publications/2004/05/19366/37243)
- Researchers have found that the open oceans are home to thousands of micro-organisms, with many that are new to science. These newly-discovered organisms may be very useful in providing new medicines or antibiotics.
(Source: www.nerc.ac.uk/research/issues/biodiversity/facts.asp)
- Coral reefs harbour vast numbers of different species, from bacteria to barracuda. They support more species per unit area than any other well-studied marine environment, including about 4,000 species of fish, 800 species of hard coral, and thousands of other species.
(Source: www.nerc.ac.uk/research/issues/biodiversity/facts.asp)
- Scientists estimate that there may be as many as eight million undiscovered species living in and around coral reefs. But these vibrant and complex ecosystems are very sensitive to environmental change, and many have been destroyed by pollution, over fishing and boats. Rising ocean temperatures are killing coral.
(Source: www.nerc.ac.uk/research/issues/biodiversity/facts.asp)