

The true state of our seas

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The waters around the UK were once some of the most productive on earth, but increasing pressures and exploitation, combined with poor protection have had dire consequences for our seas and the marine wildlife they support.

Introduction

The passing of the Marine and Coastal Access Act in 2009 was a significant step towards restoring and protecting the UK's seas and marine wildlife. Sadly however, the current state of our seas means there is a very long way to go before the Government's vision of "clean, healthy, safe, productive and biologically diverse oceans and seas" is achieved.

There is an amazing array of habitats to be found in the seas around the UK, from colourful reefs, to seagrass meadows and undersea cliffs and caves. Together they host an incredible diversity of marine wildlife, from tiny corals to massive basking sharks and orcas. Our seas also play a vital role in the economic and cultural well-being of our nation, supporting thousands of jobs in many different industries and bringing enjoyment to millions of people each year.

However, following centuries of neglect and over-exploitation, the UK's seas are currently far from healthy. Although there are still areas of great richness and beauty, the overwhelming weight of evidence shows that our marine systems have been in decline for decades¹.



Okenia elegans

Current state of our seas

Being an island nation, we depend greatly on our seas for food, energy, transportation, leisure and livelihoods. But our seas and the wildlife they support are under increasing pressure, and marine biodiversity is declining. Over the centuries the oceans have been taken for granted and regarded as a limitless resource. Fragile habitats have been destroyed, once-common species are now on the brink of extinction, fish stocks have collapsed and marine resources have been steadily depleted. The ocean processes that are as important as the rainforests in mitigating global climate change are also threatened.

There are currently seven times more vertebrate species in the UK facing extinction in the marine environment than there are on land² and in 2009 the European Commission declared that 88% of marine fish stocks were overexploited³.

The amount of marine debris in our oceans is increasing, leading to severe consequences for many species. Plastics in particular are of major concern, especially as they do not ever fully biodegrade at sea. Health problems and even deaths have been recorded in whales, dolphins, seabirds, turtles and fish, due to the ingestion of plastic. In 2008 a minke whale stranded in Normandy, France, was found to have 800kg of plastic in its stomach, including plastic bags from an English supermarket⁴.

The oceans act as a carbon sink, absorbing around 50% of the atmospheric carbon dioxide (CO₂) produced by humans. While this has helped to regulate the levels of CO₂ in our atmosphere, it is changing the chemistry of our oceans by increasing their acidity, making it more difficult for some marine wildlife to survive.

An international meeting of marine scientists in 2011 concluded that the combined effect of many different pressures on the world's oceans is having a far greater impact than previously thought⁵. The threat is not just to individual species, many of which are already verging on commercial extinction; we are now facing the potential collapse of entire marine ecosystems.

¹ Wildlife and Countryside Link briefings on Charting Progress 2: The State of UK Seas (June 2011) http://www.wcl.org.uk/docs/2011/Link_CP2_marine_briefings_21Jun11.pdf

² Marine Conservation Society, Silent Seas (2008) <http://www.mcsuk.org/information/About%20MCS/About%20MCS/Silent%20seas%20report>

³ Healing the Seas, The Wildlife Trusts, http://www.devonwildlifetrust.org/i/TWT_healing_seas_leaflet.1312984054.pdf

⁴ Simmonds, M.P. (2011) Eating Plastic: a preliminary evaluation of the impact on cetaceans of ingestion of plastic debris

⁵ International Programme on the State of the Ocean (IPSO) International Earth system expert workshop on ocean stresses and impacts – workshop report (June 2011) http://www.stateoftheocean.org/pdfs/1906_IPSO-LONG.pdf

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Why healthy seas matter

Covering 70% of the Earth's surface, the oceans produce more than half of the world's oxygen (more than the rainforests) and play a key role in stabilising atmospheric conditions. Climate change is now threatening many of our natural systems, the full impacts of which are yet to be understood. As we begin to tackle these challenges, healthy seas and oceans will be of vital importance; the healthier they are, the more resilient they will be to the adverse effects of a changing climate.

Millions of people worldwide depend directly on the sea for their livelihoods and for food; fish is the primary source of protein for up to 70% of humans⁶. A study in 2008 determined that in the UK, the marine economy contributes £50 billion to the Gross Domestic Product (GDP)⁷. As well as contributing to the economic stability of the UK, our coastal and marine environments matter to people; they are part of our cultural and historic heritage.



What next?

Action is needed now to restore our seas to their natural state. The longer we delay, the greater the damage will be and the less chance of a full recovery. The UK Government has committed to designating an ecologically coherent network of Marine Protected Areas (MPAs) by 2012. Effectively managed MPAs that afford the right levels of protection to the ecosystems within them are invaluable, allowing wildlife to thrive and habitats to recover. Studies have shown that biodiversity within 'no-take' MPAs, where all extraction is prohibited, increases by 21%, and within such areas invertebrates, fish and seaweeds are typically 28% bigger and 166% more abundant⁸.

A reform of the Common Fisheries Policy is now underway, presenting a long-awaited opportunity to bring fish stocks back up to healthy levels. Ensuring that fisheries are sustainable is vital to prevent degradation of the marine environment, and to support communities and livelihoods in the long-term.

On a global scale we need to address CO₂ levels driving climate change, as well as activities that destroy marine habitats and wildlife. The UK's energy targets include generating 15% of energy from renewable sources by 2020. Whilst we support the development of the renewable energy sector, it must be the right technology in the right place. As pressure increases on the seas, with many sea-users competing for space, it is vital that a holistic, ecosystem-based approach to marine planning is implemented, allowing space for wildlife, industry and human activity.

Action is needed now to reverse the damage, restore our marine wildlife and safeguard our seas for future generations.

⁶ WWF website, Oceans, http://www.wwf.org.uk/what_we_do/safeguarding_the_natural_world/oceans/

⁷ Pugh, D. (2008) Socio-economic Indicators of Marine-related Activities in the UK Economy, Research Report, The Crown Estate, ISBN: 978-1-906410-01-8

⁸ Partnership for Interdisciplinary Studies of Coastal Oceans (2008), The Science of Marine Reserves, www.piscoweb.org