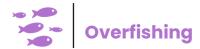
The ocean provides us with many resources that we use in our daily lives, from food and medicine to fuel and electricity. Marine industries also provide a source of income for thousands of people.

With a growing population, the demand on ocean resources is increasing, and our seas are facing many threats.



Overfishing means catching fish faster than they can reproduce. Many fish stocks are in a state of serious decline due to overfishing. Overfishing pushes fish populations into smaller and smaller numbers, until there are so few fish that fishers can't make a living and fish populations find it hard to grow again. Approximately 90% of large predatory fish such as tuna, swordfish and sharks have been lost. (1)



Trawler vessel
© NarisaFotoSS



Drilling for oil and gas can pose serious threats, from construction of platforms, transporting of goods, creating pipelines, releasing greenhouse gas and destructive oil spills.

Oil spills can affect all marine wildlife, but as most oil floats, birds are particularly at risk. Oil clings to their feathers, reducing their ability to fly and causing a loss in the waterproof properties of their feathers. This means that they can't keep themselves warm and can die of hypothermia. Marine animals can also ingest oil, which is poisonous to them.



Oil washing up on a beach after a spill © NOAA



Climate change

Climate change is the long-term global shift in the planet's average temperatures and weather patterns. Human activities are adding greenhouses gases like carbon dioxide, methane and nitrous oxide into the atmosphere, causing a greenhouse effect around the Earth which traps the sun's rays and heats up the planet.

- High temperatures are causing ice to melt on land, leading to a rise in sea levels. This sea level rise will affect coastal habitats and communities across the world.
- The reduction in sea ice is also affecting many animals in polar regions who are dependent on sea ice, including polar bears and penguins.
- An increase in carbon dioxide is altering the chemistry of the ocean and causing ocean acidification. This affects many animals with a calcium carbonate shell like scallops, mussels, crabs and corals.
- An increase in the frequency and size of storms is damaging fragile marine habitats like seagrass beds and coral reefs.
- Plants and animals are being forced to travel north or to greater depths to search for cooler waters.



Flooded community © srv007



Polar bear © Smudge 9000



Bleached coral © ARC



Tourism and coastal development

Many people use beaches and coastal waters for recreation and tourism, and this tourism is an important livelihood for many people in the UK and benefits the economy.

However, activities on the ocean like boating can discharge oil, damage seabed habitats through anchoring, and cause noise pollution. Coastal development on land reduces areas of natural coastal habitats. This reduction not only directly reduces biodiversity, but also reduces vital functions these habitats provide, like helping protect land from erosion and helping to filter nutrient runoff from land.



Falmouth, UK © Tim Green



Litter reaches the ocean in a number of ways: it's washed in from our rivers, is left on our beaches, or is cast overboard from boats.

It not only makes the marine environment look unpleasant, but it impacts the health of thousands of marine animals every year, usually by ingestion, entanglement or suffocation. Chemicals used in, and absorbed by, plastics also negatively impact animals' health. Plastic is the most commonly-found beach litter material, and it doesn't biodegrade, but breaks up into smaller and smaller pieces. which can be mistaken for plankton or other food sources.



Gull with plastic packet © Ingrid Taylar





Managing the ocean

Managing the ocean is tricky, as there are many stakeholders with conflicting interests and opinions, including governments, commercial industries, large and small-scale fishers, tourist industries, environmental NGOs, scientific communities and coastal residents.

To ensure a healthy ocean for the future, we must reduce habitat damage, ensure we harvest resources sustainably, and protect vital ecosystems.

How can we protect the ocean?

- Legislation and laws are in place to reduce threats, and many marine activities require licences.
- Marine Protected Areas (MPAs) are similar to nature reserves. They're set up to protect specific species or whole habitats. MPAs can reduce destructive activities and protect and recover biodiversity.
- Fully Protected Marine Areas or No Take Zones are strict MPAs where all damaging activities are banned to allow habitats a chance to recover and thrive.
- Restoration projects, like the EU LIFE Recreation ReMEDIES project, aim to actively restore habitats through conservation work.



Inner Sound of Skye, the site of an MPA © Reading Tom



Seagrass bed © Benjamin L. Jones





Protecting our ocean

It's vital we protect marine ecosystems to ensure a healthy ocean for the future. No matter where we live, our actions have consequences for the marine environment, which means we can all do our bit to help the ocean.

One thing we can all do is learn more about the ocean and how amazing it is. This will increase our desire to protect it, and we can share our love of the ocean to inspire others too. Find out how you can reduce the impact of the threats below:



Climate change

- Use less electricity at home and at school
- Adjust our diets at home and school to reduce our carbon footprint
- Use greener transport methods such as walking, cycling and public transport



Overfishing

- Use our Good Fish Guide to find out which seafood species are unsustainable and should be avoided
- Change the types of fish we eat at home and at school



Marine litter

- Reduce how much waste we create at home and school
- Use a lunch box instead of clingfilm
- Use refillable drinks bottles and replace plastic straws with metal
- Use your own bags when shopping
- Join local litter picks



- Support the designation of Marine **Protected Areas**
- Be conscious and considerate of the ocean and its wildlife at the seaside



Oil spills

- Switching to a green energy supplier
- Use greener transport methods such as walking, cycling and public transport

