Our Oceans

No matter how far away from the beach you live, oceans still affect your life. We need oceans for the air that we breathe (oceans produce half the oxygen we breathe), the water we drink, the food we eat, the things we need to keep us safe, warm and well.

The ocean drives climate, stabilises temperature, provides most of our oxygen and shapes the Earth's chemistry.



The ocean has also been a source of spirituality, inspiration, income, mystery and adventure for as long as humans have been able to record their thoughts.

Ocean life

Life began in the ocean, and it continues to be home to the majority of Earth's plants and animals. These range in size from minuscule single-celled organisms all the way to the Earth's largest living animal, the blue whale.

The oceans are home to an enormous variety – and quantity – of life. This life thrives in a range of ecosystems, all of which are intertwined and dependent on each other. These ecosystems include coral reefs, intertidal zones, estuaries, mangroves, deep sea, seafloor, salt marshes, kelp forests, and the Arctic and Antarctic marine ecosystems.

Oceans and people

Apart from being dependent on oceans for fresh air, water and comfortable and stable climates, human relationships with oceans are varied.

Millions of people depend on oceans for their livelihoods. Fishing provides both food and income to people, and oceans provide trade routes for the transportation of goods around the world.

In addition, oceans are vitally important to Indigenous peoples around the world, playing crucial roles in connections to culture and retaining ceremonies and customs.

For others, the ocean is a source of solace, inspiration and spirituality. It also provides countless people around the world with a source of recreation and leisure, and much-needed connections to the natural world.









Ocean facts

The ocean is a continuous body of water that makes up about 70% of the Earth's surface, although with rising sea levels this number is expected to increase. Geographers divide the ocean up into four main areas: the Pacific, Atlantic, Indian and Arctic. There are also many smaller ocean regions called seas, gulfs and bays.

The oceans hold about 1.35 billion cubic kilometres of water. This is about 97% of the Earth's water. The water in the ocean is 3.5% salt and contains traces of all chemical elements found on Earth. The remaining 3% of water on Earth is freshwater. 69% of this is held in glaciers, 30% is underground, and less than 1% is located in lakes, rivers and swamps. It is this 1% that is usable by humans for drinking.

Humans have explored nearly every corner of land on Earth. However, we have explored less than 5% of the ocean. Nearly half of the ocean is more than 3,000 meters deep, making it difficult for humans to explore and for life to thrive.

Oceans in trouble

Despite persistent human belief in the 'endless ocean', we are now recognising that human activities are affecting almost every part of the ocean.

Vast quantities of plastic waste have been dumped into our oceans, affecting huge numbers of animals. Discarded ghost nets drift through the sea, catching any animal that crosses their path. Oil spills, toxic waste and run-off from land-based activities turn vast areas of oceans into dead zones. Coastal development harms intertidal, mangrove and sand dune ecosystems. Overfishing and unsustainable fishing practices have seen many fish and shark species suffer drastic declines in numbers. Carbon dioxide emitted through human activities and absorbed by oceans is altering the acidity levels of oceans, while an influx of freshwater from melting glaciers may alter the currents, and subsequently contribute to climate change.

Now, ocean guardians across generations and around the world are speaking out and inviting us to take action to protect our precious oceans, whose health we are completely dependent upon.

"For most of history, man has had to fight nature to survive; in this century he is beginning to realise that, in order to survive, he must respect it"

Jacques-Yves Cousteau







Become an Ocean Guardian and join the global movement now!

Go to the Blue website to become an ocean guardian and take action for our ocean (https://bluethefilm.org/take-action/)

Reference list

- IPCC. 2013. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York, NY, USA. 1535pp.
- Ocean Overview -<u>http://ocean.nationalgeographic.com/ocean/explore/ocean-overview/</u>
- Ocean Exploration Facts http://oceanexplorer.noaa.gov/facts/climate.html
- Distribution of Water on the Earth's Surface https://www.e-education.psu.edu/earth103/node/701
- How much of the ocean have we explored? -http://oceanservice.noaa.gov/facts/exploration.html
- Explore the issues https://bluethefilm.org/explore/









