

About Seaweek

Seaweek is an annual event organised by the New Zealand Association for Environmental Education (NZAEE). Events are held throughout the country during the week to create community awareness of our seas and oceans, the roles they play and how we can take care of them.

When is Seaweek Held?

Seaweek is usually held at the end of February or the beginning of March each year.

What is the Aim for Seaweek?

Every year a new theme is created to focus on learning about the ocean and how important it is. The events held provide opportunities to increase awareness and discussion about the environmental issues for our oceans and how they impact us all. By learning about the ocean, its habitats and inhabitants, participants are encouraged to find ways they can take action to protect our seas and oceans.

What Are Some of the Events for Seaweek?

Each region around the country hosts a range of events. Some activities may include:

- Beach clean ups
- Planting events
- Family fun beach days
- Organised snorkel outings
- Tours and explorations of local marine reserves
- Walks around wetlands
- Viewings of documentaries and movies



Our Ocean

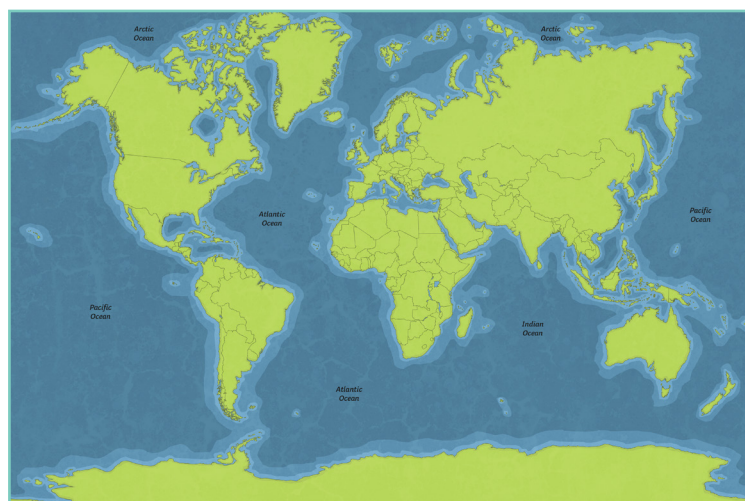
The ocean covers around 70% of the earth's surface. It is split into five areas with different names, but they all connect and flow into each other to make one large ocean. Smaller areas of the ocean that are close to and in between countries are called seas.

New Zealand is surrounded by the Tasman Sea and the South Pacific Ocean. There is just over four million square kilometres of ocean and sea as part of New Zealand's marine environment, making it the fourth largest marine environment in the world.

New Zealand's ocean environment contains a large variety of different seascapes, including rock pools, shorelines and beaches. Our seascapes and marine environment are home to many different animals and plants. There are over 15,000 named species within New Zealand's oceans.

The ocean is vital for life on Earth. People depend on it for many different reasons, such as recreation, as a food source and for its role in the water cycle.

Unfortunately, human activity is increasing the amount of pollution and rubbish in the oceans, threatening the lives and homes of sea life and affecting this important resource for people. But there are many ways we can protect and preserve the ocean and beaches.



The Ocean and Water Cycle

The ocean is an important part of the water cycle. Water is continuously moving between the land, rivers, lakes and oceans on Earth and the atmosphere above us.

Accumulation

Accumulation is the collection of water held in rivers, lakes, streams and the ocean. The ocean is the largest water accumulation. Accumulated water also includes that which has soaked into the ground to be taken up by the roots of plants.

Evaporation

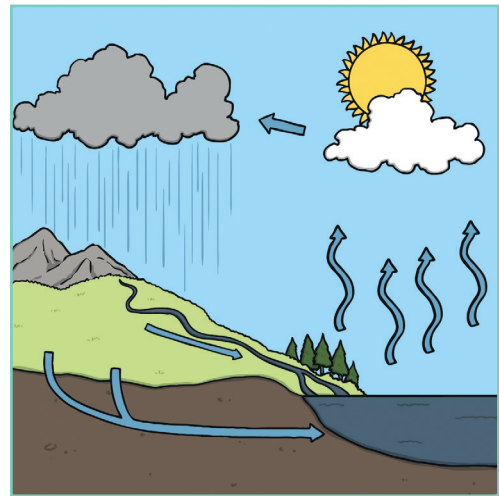
Evaporation is when liquid is turned to a gas. The sun shines down on the accumulated water, heating it up and causing it to evaporate into the air, turning into water vapour.

Condensation

Condensation is when water changes from a gas to a liquid. Once the water vapour has risen into the air, it begins to cool down. It condenses and changes back into liquid in the form of water droplets. The water droplets join together to create clouds.

Precipitation

As water droplets continue to form, they become too heavy to be held in the air. This causes the water to drop back down to the earth in the form of rain, hail, sleet or snow. When the water returns to the earth's surface it provides a food source for plants and animals and is again accumulated. The extra water that is not absorbed mostly ends up accumulating in rivers, streams, lakes and the ocean, continuing the water cycle.



Layers of the Ocean

The depth of the ocean is split into five layers. Each layer has its own habitats and inhabitants that it supports.

The Sunlight Zone

The Sunlight Zone is the top layer, up to 200m below the surface. Because it gets the most sunlight of the layers, it is the warmest and therefore has the most life. Living things found in the Sunlight Zone include coral reefs, seaweed, algae, plants and plankton, krill and small fish, dolphins, sharks, blue whales, salmon and sea turtles.

The Twilight Zone

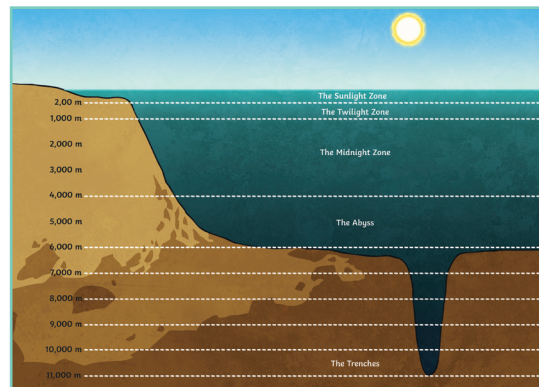
The Twilight Zone is up to 1000m below the ocean surface. Because it gets very little sunlight, there are no plants living in this habitat. Animals living in this layer have different adaptations to those living in the layer above. For example, many have large eyes to assist them seeing in the darker environment. Creatures found in the Twilight Zone include sea cucumber, swordfish, some types of octopus, sperm whales and wolf eels.

The Midnight Zone

The Midnight Zone is up to 4000m below the ocean surface. This layer makes up 90% of the total ocean volume. Sunlight does not reach this layer so it is completely dark. Animals living in this zone create their own light to help them hunt prey. Other creatures from the above layers may dive down to hunt here. Animals found in the Midnight Zone include anglerfish, jellyfish, squid, large whales and other types of octopus.

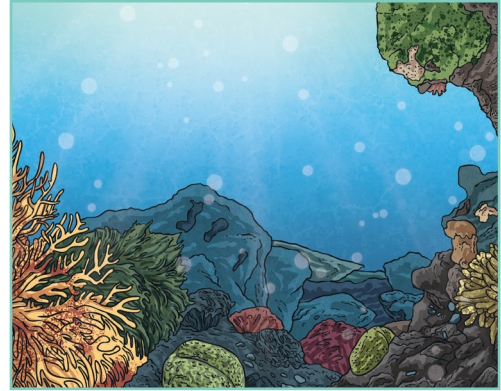
The Abyss

The Abyss layer is up to 6000m below the ocean surface. 75% of the total ocean bed is in the Abyss layer, which is made up of thick mud. It is pitch black and the temperature is near freezing so there are very few animals living here. The only inhabitants are invertebrates such as squid and sea stars.



The Trench

The Trench is known as the ocean floor and is up to 11,000m below the ocean's surface. It is made up of narrow valleys and underwater canyons. Because of the high pressure and freezing temperatures, this zone can only be explored with specialist scientific equipment. The Mariana Trench is the deepest known part of the ocean at almost 11,000m deep.



Humans and the Ocean

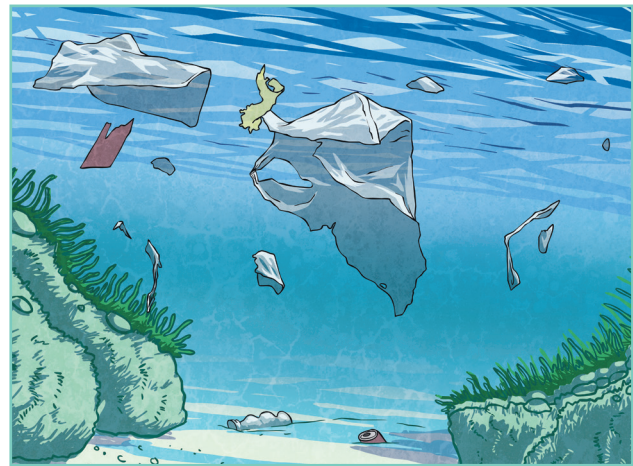
Humans Depend on the Ocean

The ocean is a part of everyday life for a lot of people in New Zealand. Nearly three-quarters of the population live close to the sea. It is valued for cultural, social and economic reasons. People enjoy visiting the beach with their families for swimming, picnics and games on the sand. Water sports such as surfing, jet skiing, kayaking, boating and snorkelling are also very popular in New Zealand. Fishing is another popular recreational activity but is also an important part of the New Zealand economy. The ocean is used to transport people and goods to and from New Zealand.

Humans Impact on the Ocean

Unfortunately, as populations grow and countries continue to develop, rubbish and other pollutants in our ocean have also increased. Because rainwater flows from the streets into stormwater drains, rubbish left on the ground will move with the water through to local streams and rivers. From there, the rubbish ends up in the ocean, threatening the lives and homes of sea creatures.

There are concerns that fish numbers are decreasing through overfishing. This means that more fish are being removed from the ocean than are being born to replace them. When large numbers of fish species are depleted, this affects the marine ecology and most importantly the food web within the marine environment.



How We Can Protect the Ocean

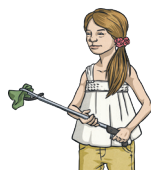
There are many ways we can take care of our ocean. We can take action to support cleaning it up and we can help protect it from further damage. Here are some things we can do to protect the ocean:

Make Sure We Keep Beaches Clean and Tidy

When we spend the day swimming, playing and having picnics on the beach we need to make sure we take our rubbish and belongings with us.

Beach and River Clean Ups

We can take part in organised beach and river clean ups where everyone works together to clean up local beaches and waterways.



Only Let Water Down Outside Drains

As rainwater runs into the gutters on the streets it collects rubbish and other pollutants from the streets which are then released into rivers and streams from stormwater drains. We can prevent this by keeping our streets and public areas clean and tidy. We need to remember only rain down the drain!

Reduce, Recycle and Reuse

We can look carefully at the things we buy, and reduce the use of packaging that is going to end up as rubbish (such as vegetables wrapped in plastic). We can use items that can be reused a number of times, such as drink bottles and shopping bags. It is important to always recycle glass, plastic and paper when we are finished using them. This will help decrease the amount of rubbish found in our environment and waterways.



Follow Fishing Limits and Guidelines

There are guidelines within New Zealand for recreational fishing. There are limits on how many fish can be caught and what size they are. There are also limits and guidelines in place for commercial fishing vessels. Many fish and seafood shops are encouraging people to try less popular fish, to remove the stress on the population of commonly eaten fish from the sea.

