

Plastic is a material that has many useful properties. It is strong, lightweight and can be coloured, melted, shaped, squashed, rolled into sheets or made into fibres.

Plastic itself is an amazing invention. It's the way we're using it that's the problem. Plastic takes hundreds of years to biodegrade. Some plastics don't biodegrade, they simply break down into smaller and smaller pieces. Yet we use plastic to make things that are used just once then thrown away, an example of this is plastic food packaging.

Before plastic, food was either fresh and wrapped in paper or kept in a tin, a glass jar or a bottle.

## How does plastic end up in the ocean?

There are many ways plastic can end up in our seas and oceans:

1. Litter dropped in the street blows into rivers and drains, then flows into the sea.
2. When it's transported to landfill lightweight plastic can be carried by the wind, ending up in the rivers and drains and eventually the sea.
3. Tiny pieces of rubbery plastic fly off our car wheels all the time.
4. There are also tiny plastic fibres in clothes. These wash down the drain when we wash our clothes.
5. Some of the plastic we put in our recycling bins may even end up in the sea. Thousands of tonnes of plastic are still being sent to countries that lack the infrastructure to reprocess them, so they are sometimes burnt, put into landfill or thrown into the sea.



## What are the consequences?

Plastic waste in the ocean is a grave danger to all marine life. From tiny corals to majestic whales, more than 700 marine species are known to be killed either by ingestion of the plastic or entanglement - resulting in more than 100 million animal deaths a year, that we know of.

Unlike humans, wild animals do not have the ability to distinguish plastic from 'digestible' materials. One in three leatherback sea turtles have been found with plastic in their stomachs. Plastic waste causes blockages in their digestive system preventing them from absorbing nutrients, until they eventually starve.

Animals can also become entangled in plastic waste, particularly discarded plastic fishing nets and the plastic holders you find on cans. These animals may be unable to surface or become exhausted from drag and drown. Incisions caused by plastic nooses can cause infections that eventually lead to death.

The microplastics eaten by sea creatures can enter the human food chain. Microplastics have been found in sea salt, tinned and fresh fish and mussels. Most studies to date have only analysed the stomach and gut content of these organisms, which are usually removed prior to consumption. But one study has found microplastics in fish liver, suggesting particles can get from digestive tissues to other body parts.



## What can you do?

You can help by organising litter picks and beach cleans, by recycling as much as possible and by changing your habits. Buying loose fresh fruit and vegetables, using re-usable shopping bags, supporting zero waste shops and replacing throwaway items for non-plastic alternatives are just some of the things you can do to reduce plastic waste. Why not try a bamboo toothbrush?

Or a shampoo bar? Or switch to a refillable washing up liquid?

## Did you know?

On average a plastic bag is only used for 12 minutes, but the plastic it's made from lasts much, much longer.

It's likely to be around for the next 500 to 1000 years!!!