

Plastic - Not So Fantastic!

On the screen in front of us there is a [photo](#) of a dead seal with a plastic bag stuck over its head. The caption below it says, 'The plastic you use once, tortures the oceans forever.' It makes us feel sick to think that the seal would have suffered because of someone's carelessness with plastic.

According to the [WWF](#) website every year 100,000 marine animals die from plastic. 4.8 - 12.7 tonnes of plastic is entering the ocean each year. Microplastics, fishing gear and plastic pollution are among the biggest environmental threats. Plastic is hurting marine animals and making them sick. Seeing that photo has changed us forever and makes us want to do more for the environment. Has it changed you?

One of the main problems for marine animals is microplastics. Microplastics are minuscule plastic pieces which have degraded over time. After ingesting microplastics, marine animals can suffer for months or even years before they die. 80% of microplastics are from land based sources, like bottles and bags which have disintegrated.

What does plastic do to harm marine animals? If a seabird swallows too much plastic, the indigestible scraps build up in the bird's gut preventing the bird from digesting real food. Plastic also contains toxins that increase the chance of disease and affect reproduction.

Ghost gear is one of the problems that causes microplastics. Ghost gear is fishing gear that has been lost or abandoned at sea. Nets and other man-made equipment can entangle and kill many types of marine animals.

People know about ghost gear entangling and killing large sea mammals, but what they probably don't realise is that tiny

fragments of fishing ropes and mesh have been identified in crab and scampi stomachs ([World Animal Protection](#)).

Sam Fay, who runs '[Stitch-O-Mat](#)' and '[Sustain South Brighton](#)' told us that microplastics is also in our clothing. Clothing that contains plastic, releases 2000 tiny plastic micro fibres into the sea whenever it gets washed. To stop this, you can buy a filter for your washing machine and it filters the water from the microplastics to stop the plastic from flowing into the sea.

In 2014, 15 - 51 trillion microplastic particles were floating in the world's oceans, weighing 93,000 - 239,000 tonnes ([National Geographic](#)). By 2050, 99.8 percent of all the 189 marine species included in a 2015 study, will be eating plastic.

What can we do? We can use hemp instead of products that are bad for the environment. Hemp is a plant that can be used for clothing and as a replacement for some plastic. Hemp products can be recycled, reused and are 100% biodegradable. Hemp can also take out large amounts of carbon dioxide.

Hemp is a good option for clothing because it is strong, weather resistant, versatile, easy on the environment and cheaper to cultivate than other clothing materials. Hemp is three times the tensile strength of cotton.

Our class and school have been doing many actions to help the environment. Last year, Matt Stanford, who is the EnviroSchools Canterbury Facilitator, came to our school and helped us complete a rubbish audit of our bins. As a result of this, we wrote to the school PTA for a compost bin, so we could use our food waste as compost for our gardens. This helps the gardens and reduces our methane gas emissions which would occur if it went to landfill.

To help with the problem of pollution and rubbish, our school has been conducting rubbish cleanups around the estuary/domain, behind our school. We have gone right into the mud in the estuary and found things like drones, sinks, lots of straws, lolly wrappers, bottle tops and plastic bags.



Taken by Melanie Field.

In Term 1 this year, we did a Mm2 survey of our estuary and planted native plants in the mud to make the mud rich with oxygen for small creatures living there.



Taken by Melanie Field.

On the 24th of July this year, the Year 7/8 students planted a selection of native plants behind our school and beside the estuary, to help the native animals.



Taken by Melanie Field..

We have also started tracking and trapping pests behind our school to help our native trees. After doing this, we feel a connection to the estuary and are more likely to pick up rubbish. We are kaitiaki of our estuary.

As we write this, roughly 2,910,000,000,000 plastic bags have been produced this year. As well, ~5 trillion plastic bags will be consumed in 2019. That's 160,000 per second! Put together in a line, those plastic bags will be long enough to go seven times around the world, and cover an area twice the size of France ([World Counts](#) website).

Ever since I (Rosie) started researching plastic, and telling my mum how bad plastic pollution is, she has been making her own muesli bars, froyze balls, crackers and her own bread or trying to buy bread in paper bags. At home we have been reusing packaging that oats, bread, flour, nuts and berries come in rather than using plastic wrap, sandwich paper or ziplock bags. We have cut down on buying food wrapped in plastic and started using natural toiletries. I have started making more beeswax wraps and sandwich bags. We also have plans to start shopping at Bin Inn.

After researching for this article, we have both changed. We have learnt a lot and are prepared to change things in our life to cut down on plastic. Are you ready to cut down on plastic, too?

Be part of the solution, not part of the pollution!

By Rosie Arrillaga and Neve Sparks

Interviews:

Sam Fay ([Stich-O-Mat](#), and [Sustain South Brighton](#)) community stakeholder

Websites used:

[The Inspiration](#)

[WWF](#)

[World Animal Protection](#)

[oceana.org](#)

[National Geographic](#)

[The World Counts](#)