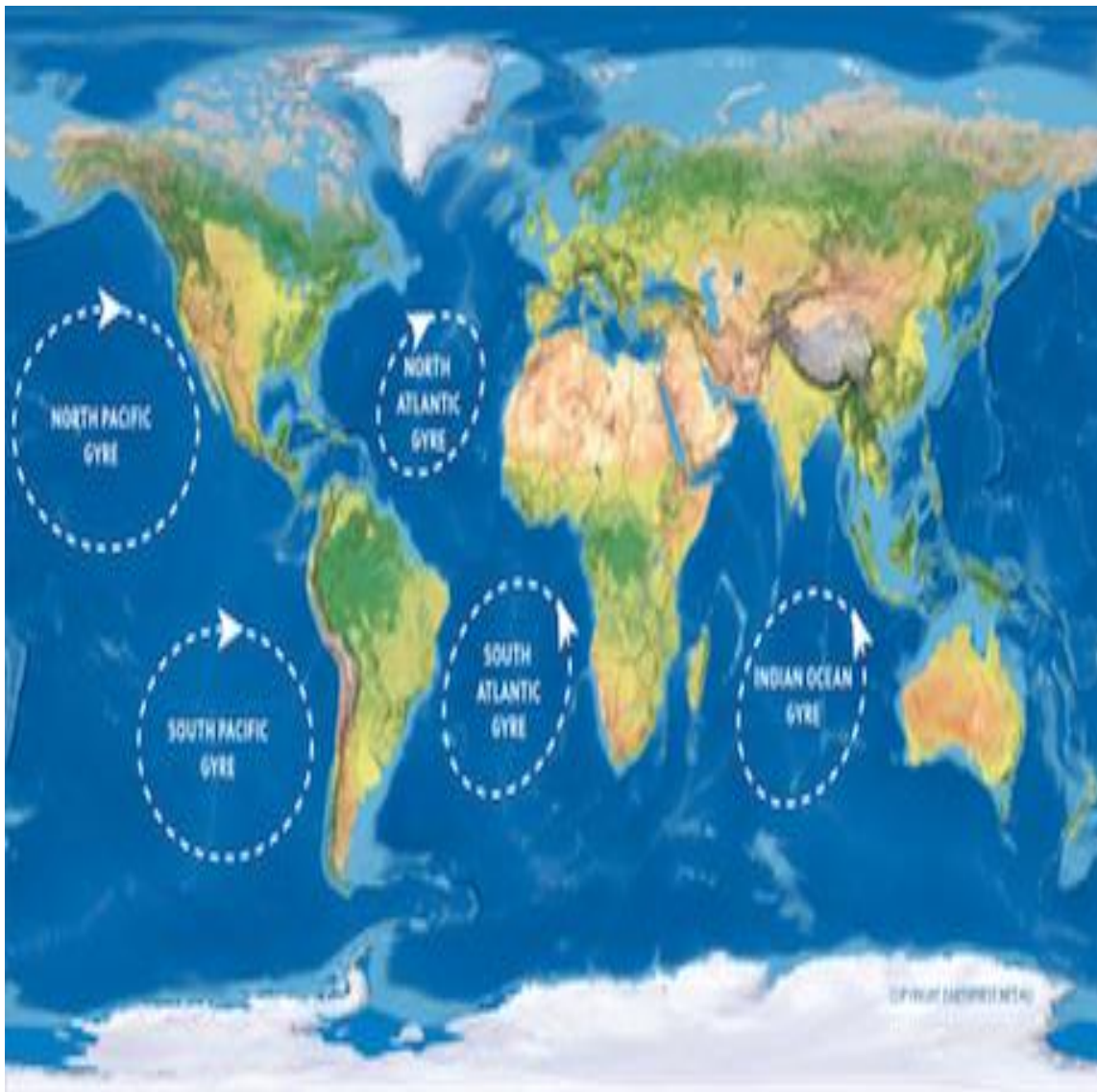


ENVIROKIDS WORKSHOPS

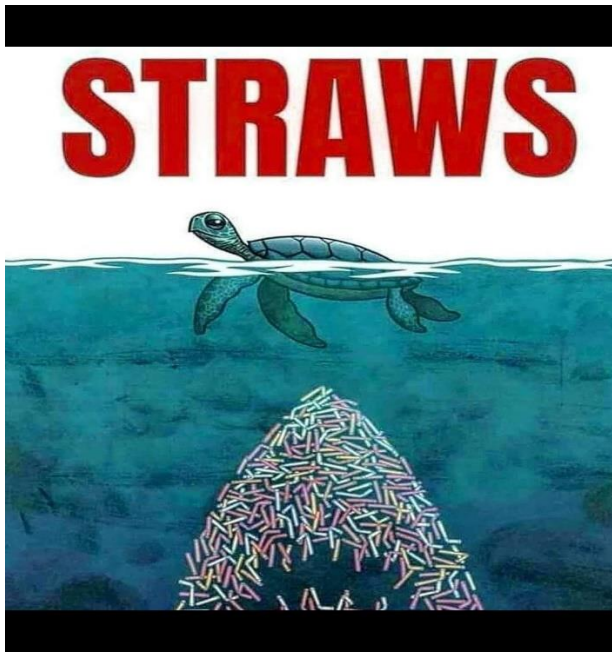


THE GARBAGE ISLANDS

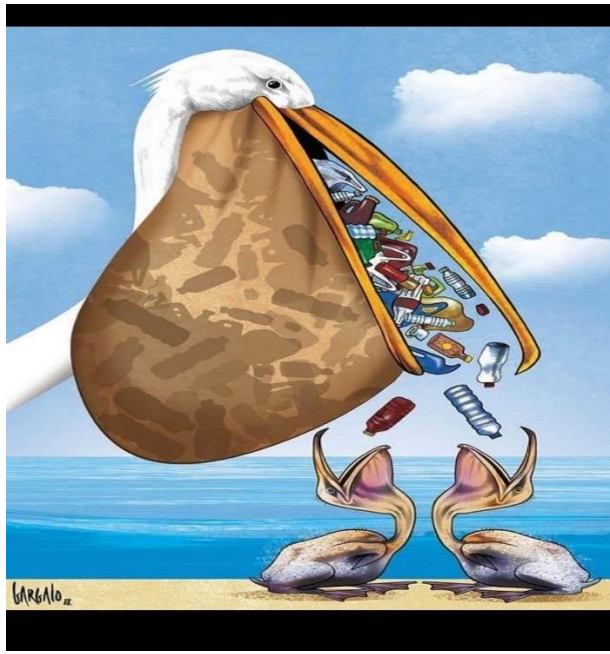


The Garbage or Rubbish islands - There are **five** Garbage islands in our oceans. One in the Indian Ocean, two in the Atlantic Ocean, and two in the **Pacific** Ocean. **Garbage patches** of varying sizes are **located** around the world. The most famous of these **patches** is often called the "**Great Pacific Garbage Patch**." Which is located between California and Hawaii. These Islands are formed by the currents in our oceans bringing the rubbish to a certain area like a big **washing machine**, so the islands are formed. Pollution has been a major issue worldwide for years, so there is no denying garbage has been building up over the years, including our oceans. This has led to the formation of garbage patches, massive accumulations of garbage found in specific locations in the ocean. These patches are having a major impact on our planet's future. Many areas of the world's oceans are littered with plastic and other substances dumped out from equally polluted rivers, eventually accumulating through tides and currents into these large masses of trash hovering on the water's surface. These rubbish islands cause a massive effect on our environment and to all our sea creatures. We will in this issue have a look at some of the issues and have a look at how we can help solve the problem.

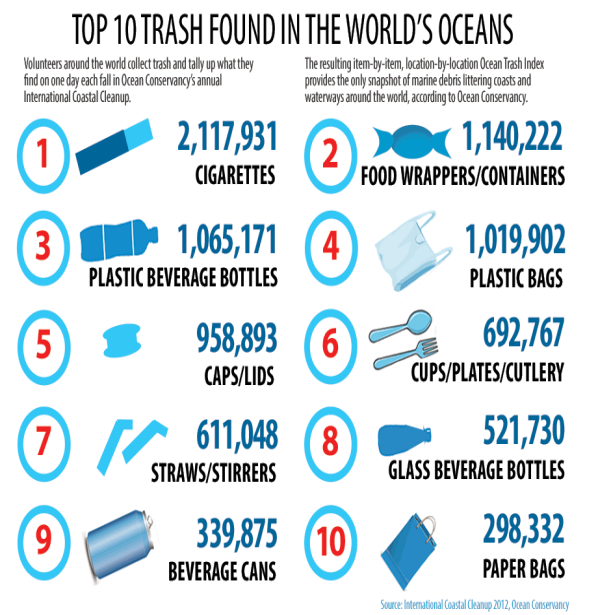




One of the big issues is the straws in our oceans.



Our wildlife is been affected by the plastic in the oceans.



We need to think where our rubbish is going, here is a list of the top 10 items found in the ocean.

What are the Garbage Islands

The garbage islands were discovered in 1997 when Captain Moore was sailing his boat home to California after completing a sailing race. Captain Moore and his crew were sailing through the North Pacific, one of the most remote parts of the ocean, they saw a large amount of plastic debris floating in the water. Captain Moore wrote an article about what he had seen *“As I gazed from the deck at the surface of what ought to have been a pristine ocean, I was confronted, as far as the eye could see, with the sight of plastic. It seemed unbelievable, but I never found a clear spot. In the week it took to cross the subtropical high, no matter what time of day I looked, plastic debris was floating everywhere: bottles, bottle caps, wrappers, fragments.”* A colleague of Moore’s dubbed the vast area of plastic debris the ‘Great Pacific Garbage Patch’, and the name has stuck ever since. What Captain Moore had discovered was one of the biggest natural disasters on the planet. People think when it comes to the Great Pacific Garbage Patch: that it’s an actual island. This probably comes from the fact that it is sometimes called ‘plastic island’. It is not an island, rather it is a huge patch of ocean that contains a lot of plastic and rubbish. The vast size of the garbage islands is immense, especially the Great Pacific Garbage Patch. It’s size is roughly 24 times the size of Ireland and in some parts the garbage can be 9ft deep. This is one of 5 garbage islands around the world, that’s is a lot of rubbish.



All of this plastic is having an effect on the creatures in our oceans. Discarded fishing nets (Ghost Nets) from big fishing trawlers/Boats make up a lot of the rubbish found in the oceans. Ghost nets can drift for years in the ocean and one of the problems with ghost nets is that it can continue to catch marine animals long after being abandoned. Marine life that is unfortunate enough to enter the Great Pacific Garbage Patch, such as fish, sea turtles and dolphins, are at serious risk of becoming caught and tangled by a piece of ghost net. These ghost nets can be very big and for a mammal like a turtle or dolphin who need air to survive they can drown. Earlier this year, a young sperm whale almost died after spending three years tangled in a ghost net. During the observation they saw young calves with their mothers. Calves are especially vulnerable to becoming trapped. With the wide range of ocean plastics in the garbage island, it is highly likely animals in the area become tangled in these nets .It’s believed the amount of plastics in the ocean could triple over the next decade. It is clear the problem of plastic pollution has no geographic boundaries.



Many birds, turtles, and other sea animals go to Pacific Islands to lay their eggs and raise their young. Unfortunately, they eat the smaller pieces of plastic, thinking that they are food swimming in the ocean. Turtles mistake plastic bags for jellyfish (their main food source) and the bags get caught in their stomachs and they die. Birds think bits of small plastic are food or insects and feed them to their chicks. Plastic rings from bottle caps are also a main concern and many well-known drinks are everywhere in the garbage islands, cigarette lighters are also items that the birds think are food. The albatross, like many other sea creatures, think that plastic pieces in the ocean are attractive: They look like food. So, every time we see an albatross or other bird swoop into the ocean to catch its prey, it's quite likely the bird is swooping up a bottle top or a lighter. We are losing thousands of creatures every year due to rubbish in our oceans, all these creatures are eating plastic in some form. On one island called Midway every nesting bird on the island had bits of plastic in their nests and plastic never goes away. Plastic breaks down to smaller pieces called Microplastic, this Microplastic could in some way look like glitter you put on your face for dress up. So small chicks and fish eat this and end up dying. "We need to stop"



The Ocean Clean Up

In 2015, a young man named Boyan Slat set up an organization called the Ocean Cleanup. His goal is to remove 50% of the garbage from the ocean every 5 years. He designed a simple solution that will help take the rubbish from the ocean and save our wildlife.

Boyan was only 16 when he set up the Ocean Cleanup. In his home country Holland, he discovered that the Garbage Islands were a huge issue. The long inflated tube pictured below that stretches nearly 100 meters and floats on the water's surface collecting the rubbish. The Ocean Cleanup team have also developed the River Cleanup Boat called the Interceptor. This boat collects the rubbish in the rivers before it gets to the ocean. The Interceptor is totally self-powered so there's no one on board and it uses the sun to power it. There are 4 of these Interceptors in operation around the world and they are already making a big impact. This is something we can all help with, and we can go into a little bit more detail in the next issue "Single use plastic and recycling" We want our oceans back.



Activities to do at home

Do a home project on ways you think could help clean up the oceans.

Draw some of the creatures you find in the Pacific Ocean and add them to your scrapbook.

Have a look at the Ocean Cleanup site and Video. <https://youtu.be/UcnklzBQBbE>

<https://theoceancleanup.com/>



Quiz

- 1, How many Garbage islands are there in the world?
- 2, Where is the great pacific garbage island?
- 3, Name 3 of the main items found in the ocean?
- 4, How many times bigger than Ireland is the great pacific garbage island?
- 5, Who was the captain who is said to have named the pacific garbage island?
- 6, What are the net's discarded by boats called?
- 7, Who from Holland set up the ocean cleanup?
- 8, Plastic that breaks into very small pieces is called what?
- 9, What is the name of the river cleanup boat?
- 10, How much rubbish is the ocean cleanup hoping to clean up every 5 years?

All answers will be on our next issue (Single use plastic and Recycling)

Quiz answers from issue 2 The Amazon

- 1, How many species of birds can be found in the Amazon? 1300
- 2, What is the name of the creature that's like a Crocodile or Alligator? Caiman
- 3, Name 3 types of Monkey to be found in the Amazon? Squirrel Monkey, Spider Monkey, The Howler Monkey.
- 4, What is the name given to the chopping down of trees? Deforestation
- 5, How many countries does the Amazon spread across? 9.
- 6, What colour are the Dolphins in the Amazon? Pink.
- 7, What's the Nickname or other name for the Amazon?" The lungs of the planet."
- 8, How many times would Ireland fit into the Amazon? 67 times.
- 9, Is there an Ant called the Bullet Ant? True/False. True.
- 10, The Amazon would stretch from Dublin to where? Orlando in Florida USA



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