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# The Environmental Impact of Straws and Other Plastics

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Staff Piece

Increasingly, the problem of plastics and their effect on the environment has been making headlines and starting movements to end the use of plastic straws and plastic all together. Tons are discarded every day and very little of that is recycled, so it ends up in our landfills or waters. Plastics also take up to 1,000 years to decompose in our landfills. As they decompose, they release chemicals that harm our plants, animals, humans, and our waters.

As of January 2019, plastic straws were the [8th most common ocean trash](#) harming turtles, fish, and seabirds. Seabirds and marine animals face an alarming death rate due to plastics; as of the end of 2018, over [1 million birds and 100,000 marine animals die each year from ingesting plastics](#) ([see picture below](#)).



Animals, like seabirds and turtles, do not understand the difference between plastics and food, so they ingest whatever they can find. As the plastics break down inside of them, they release toxic chemicals that can kill them. These harmful plastics can get

stuck on or inside animals, such as the turtle ([pictured below](#)) with a straw stuck in his nose or on the penguin in the movie Happy Feet who has a six pack ring stuck around his neck. The fish in our waters are also affected by plastics; about [12,000 to 24,000 tons](#) end up in their digestive systems in the North Pacific alone.



In addition to the visible effects plastic can have on wildlife, there are many other less obvious effects that take place. There are toxic chemicals that are released when plastics start to break down that are additives such as [phthalates and Bisphenol A \(BPA\)](#). They are known to have hormonal effects that influence the hormone system of vertebrates and invertebrates. They can also cause inflammation, pass through cellular barriers, and cross highly selective membranes such as the blood- brain barrier or the placenta. These toxins can also cause changes in the gene expression of animals and the process of biochemical reactions.

In terms of plastic straws, there is a chemical called polypropylene, a petroleum byproduct, that is the same chemical in our gasoline and does not degrade in the environment. Instead, this product will float on the top of water to be consumed by animals or become part of an ocean gyre. An oceanic gyre is a floating 'island' that is made up of human waste and does not degrade. One of the largest gyres is The Great Pacific Garbage Patch, which houses an estimate of [1.1 to 3.6 trillion](#) pieces of plastic. [Another statistic from 2012](#) stated that there were over 32 million tons of discarded plastic that ended up in either our oceans or in landfills. Looking at the trends of plastic use in our country, it is wise to assume that this statistic has only gotten larger since 2012.

So, what is being done to combat this issue, and how can we help to solve the problem? Organizations, such as [“One Less Straw”](#), and small groups of people and individuals, such as Zachary Merrick (guitarist of All Time Low), have taken action to clean our land, beaches, and oceans on a regular basis. In addition to this, hundreds of people across the country have taken action by refusing to use plastic straws or plastic bags at the grocery store. You can take action by using reusable paper or bamboo straws instead of plastic ones, taking your own reusable bags to the grocery store, and using reusable cups instead of plastic ones, etc. Also, taking part in clean ups in the ocean, on the beach, and in forests and towns are also great ways to take part. With the combined efforts of more and more people, the problem of plastics can be reduced significantly over time.

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