

A Plastic Predicament

The gentle sounds of running water paired perfectly with the orchestra of crickets and toads along Lake Lanier as the setting sun dipped cotton candy pink into the water. Every Saturday evening my father and I would go fishing at the lake, and every Saturday the wonderland would feed sweet scenery to my eyes and harmony to my ears; however, this night was different. The usual tunes of crickets and toads were interrupted with a constant quacking. The quacks continued to get louder until I ran to the noise and found a family of ducks: a father, five ducklings, and its mother trapped in a plastic soda ring. The plastic was wrapped in a way that made it hard for her to swim, so the family headed toward the rocky side of the lake.

Stories like this are always being posted on social media- stories about innocent animals living in, consuming, or being consumed by anthropogenic trash; however, it never occurred to me that these stories could just as well happen in front of my eyes. The mother duck was struggling to merely stand with the plastic dragging across every rock. I tried my best to get close so I could remove it, but with every step the birds waddled as fast as they could in the other direction. They were panicked by my sight, and who could blame them? They were running away from the species that implanted this object of destruction. After fifteen minutes of chasing the ducks around the rock bed, the soda ring trapped the mother under a pointed rock, and I was finally able to remove the plastic.

This story is identical to a million others in the world. That day I thought to myself “what would have happened to the mother duck if I had not seen her?”. I removed the plastic, her disability. I was a hero, but was I really? Even though I had never littered in the streets, I was still guilty of purchasing six-pack sodas with plastic rings, which could just as easily be blown

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away from garbage bins by the wind. I was guilty of consuming at least five plastic water bottles a day, which contribute to the massive piles in garbage dumps, as well as using an excessive amount of plastic grocery bags when going to Walmart, which blow towards oceans, causing indigestion problems for sea turtles that eat them. Up to 80 percent of ocean plastic pollution enters the ocean from land (Center for Biological Diversity). It is believed that there are 5.25 trillion pieces of plastic debris in the ocean, which kill an estimated 100,000 marine creatures and one million seabirds a year from plastic entanglement and pollution (Ocean Crusaders). These days, it is impossible to go to the beach without seeing a single piece of litter. With the constant growth of waste production due to human expansion, it is predicted that by 2050 there will be more plastic than fish in the world's oceans (Future Agenda).

Many people believe that in order to reduce the amount of plastic pollution in aquatic ecosystems significantly, they must drastically change their way of life. This causes many to deem the increasing pollution issue as inevitable, because they think their actions will not make an impact. On the contrary, the more people making clean environmental decisions, the less pollution there will be. It is true that simple lifestyle changes can cause a huge impact for the environment and the animals that live in them. After that day at the lake, I made sure to cut up all plastic soda rings before throwing them away. I also replaced the five plastic water bottles I consumed everyday with a refillable water bottle. 60 million plastic bottles are thrown away everyday in the United States alone (Green Sheep Water). Imagine how many plastic water bottles are discarded to landfills each year, and how many of those bottles end up in lakes and oceans due to waste mismanagement and illegal dumping, replacing the homes of millions of aquatic organisms with islands of trash. By converting to a reusable water bottle, I can single-handedly prevent 1,825 plastic bottles from polluting our world every year. If everyone in

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Atlanta, Georgia made the same switch, over a million plastic bottles would be saved every day.

This is just one example of how a small lifestyle change can make a huge difference.

The government can also play a large role in reducing plastic pollution in waters. In 2017, Israel passed a law requiring supermarket chains to charge three cents for plastic bags, and “since then, plastic bag use has dropped 80 percent according to the country’s Environmental Protection Ministry”(From the Grapevine). This law has saved almost 8,000 tons of plastic since its enforcement (From the Grapevine). Plastic bags not only cover the water surface, blocking sunlight that is essential to the food web, but they also cause indigestion problems for the animals that mistake them for food. Additionally, fish, birds, seals, and other aquatic creatures can get entangled in free flowing plastic bags, making it difficult for them to swim and hunt. Even plastic bags that don’t end up in waters will take more than 500 years to degrade in landfills, breaking down into microplastics that absorb toxins, which then leak into waters through runoff, poisoning animals (Center for Biological Diversity). It only takes four family trips to the supermarket to accumulate 60 plastic grocery bags. Laws forcing supermarkets to charge for plastic bags would convince shoppers to use reusable cloth bags instead, saving copious amounts of plastic and degraded toxins from entering water systems and harming animals.

Aside from simple lifestyle changes, individuals can join service programs that work together to clean up local aquatic habitats. Programs such as The Ocean Cleanup bring people from around the world together to create ways to clean the pollution accumulated in the ocean. They focus their efforts on the Great Pacific Garbage Patch, which is the famous area located between Hawaii and California where litter, plastics, and other debris collects. The Ocean Cleanup aims to clear 50% of the Great Pacific Garbage Patch in 5 years (The Ocean Cleanup).

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More information about joining this program can be found at <https://www.theoceancleanup.com/careers/>. In 2017, when I discovered this program, I was not old enough to join. Instead, I planned a beach trip with five of my friends: we drove to Jekyll Island and spent an afternoon collecting litter from the shore. Our group of six were able to restore 2 miles of polluted beach shore in just two hours, collecting 10 large garbage bags of plastic bottles, grocery bags, soda cans, food wrappers, and other trash left by beachers or washed up by the tide. We then dumped the bags of trash in a local restaurant dumpster, and spent the remainder of the day celebrating on our newly cleaned shores. Group efforts such as this not only help prevent animal suffering caused by plastic pollution, but it is also a great way for people to get together and form everlasting bonds through a common goal.

About two-thirds of Earth's surface is covered in water, and with our busy lives it's easy to forget that what we do on land also has a major impact on the organisms living in waters. At least 100 million marine mammals are killed each year from plastic pollution (One Green Planet). Being aware of our impact is the first step to change, so in my final year in high school I plan to team up with multiple extracurricular clubs such as Student Council, Key Club, and Beta to host an Environmental Impact Awareness Week, teaching the community how small changes in our daily lives can save thousands of tons of plastic and microplastics from entering aquatic ecosystems, and thus saving millions of animals from plastic pollution. Environmental Impact Awareness Week will begin with a fair of fun games and food in order to bring the community together, and people will be educated on what they can do to save plastics from waters throughout the week. Profits made during the fair will be donated to clean up programs such as The Ocean Cleanup, and people will be encouraged to spread awareness to their relatives and churches as well. The week will end in a beach trip for those who sign up to restore southern

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Georgia's beaches, and a celebration barbeque by the sunset. Environmental awareness is something that carries on with you for the rest of your life, and since my encounter with the mother duck by the lake- witnessing first hand what pollution can do to innocent animals- I continue to think of new ways to reduce plastic consumption, sharing my ideas with others in order to reduce the negative impacts of human life on animal life one step at a time.

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