

Environmental Newsletter

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What is Plastic Pollution?

Lina Sanchez

As one of humans most produced materials because of its easy accessibility and cheap price, plastic is used almost everywhere in our everyday lives. However, many are unaware of its disastrous effects. Unfortunately, this ever convenient material causes many problems for the environment, which are known as plastic pollution. Plastic pollution can not only affect the world, plants and nature around us, but also humans and animals. One reason why plastic is so dangerous is because of the harmful chemicals used in plastic objects to keep the material cheap and durable. This can affect any living organism in earth, resulting in many dying or getting ill from these chemicals. Another danger of plastic pollution is when animals, mostly marine animals, getting entangled in a plastic object, preventing it from freeing itself, resulting in a slow death. The last reason why plastic is harmful is because it does not degrade as fast as more natural materials do. Plastic tends to accumulate in large amounts because of its strength and hardness, and more is being produced each day. Scientists predict that the weight of plastic in the ocean will be heavier than the weight of fish in the ocean.



Plastic pollution has been a consistent and harmful issue in our environment that affects humans and the organism that we share the planet with.

The Ban on Microbeads

Mina Shimanda

Microbeads are dangerous to sea animals and are even being considered to be banned. These deadly beads are often found in exfoliating scrubs and toothpastes with a total estimated amount of 16-86 tons of them. In one study, they found that 36.5 percent of English Channel fish contained microbeads. In 2014, there was an estimated 15 to 51 trillion plastic beads floating in the oceans. Canada, the United States, and many other countries have already banned the inclusion of microbeads in cosmetics. This ban was passed in the United States in 2016, and will go into effect in July of 2019.



West African Giraffe Populations

Charlotte Mackin

For the past 50 years, the West African giraffe population has been in decline due to climate change, illegal hunting, and loss of habitat land. Recently, with the help of Niger's Gadabedji Biosphere Reserve, eight giraffes have been introduced to the conservation helping to sustain their population for as long as they can. During the mid-1990's there were only 49 West African giraffes left in the wild, thus resulting as them being listed as an endangered species.



Due to the efforts in collaboration with the Nigerian government and international partners supporting wildlife preservation, the West African giraffe

population has increased greatly to around 600 giraffes in the wild and recently, their species was downgraded to vulnerable by the IUCN. Some conservationists believe that the effort to preserve the West African giraffe population in Gadabedji will increase the legitimacy of the developing wildlife reserve in Niger.

How Does a Species Become Endangered?

Emily Kim

Many species are endangered due to human affairs, many of which have to do with the environment. Some of the effects that people have on animals include diseases, habitat loss, climate change, and degradation. The leading cause of extinction of animals is habitat loss. The habitat of animals are used for human consumption and lead to many consequences to animals such as orangutans, elephants, and rhinos.



Destruction of the Amazon Rainforest

Climate change is an issue that we struggle with even today. Animals are affected by climate change because of the effects it has on food source, temperature,

and reproduction rates. Human affairs can make such a huge impact on the animals of the wild, ranging from habitat loss to climate change.

The Impact of Agriculture on Global Warming

Elizabeth Weise

Surprisingly, the agriculture industry has a significant impact on climate change as a result of the distinct gases it produces. This is due to the fact that all products ranging from plant products to livestock produce mostly methane and nitrous acid, which have more warming potential than carbon dioxide, but on the the other hand also dissipate more quickly. Recently, however, it has been estimated that farming resulted in the production of an estimated 574 million metric tons of carbon dioxide emissions in the United States and 54 million metric tons in Canada, accounting for approximately 8 percent of the country's greenhouse gas emissions. Methane has become an increasingly examined subject for researchers due to a sudden boom in its worldwide

levels since the 1990s.



In the United States, an estimated 42 percent of agricultural greenhouse gas emissions come from livestock. The majority of these emissions come from ruminants, such as cows, buffalo, and sheep, who possess the ability to ferment food using bacteria in their stomachs, allowing them to consume products, such as grass, which humans are unable to eat. This results in the production of large amounts of methane whenever these ruminants burp or produce gas. The remaining amount of these livestock emissions come from non-ruminants, such as pigs, horses, and mules, which produce lesser amounts of methane.

Greenhouse gas emissions from agriculture account for between 14.5 and 18 percent of human-induced emissions. This percentage is only slightly lower in the

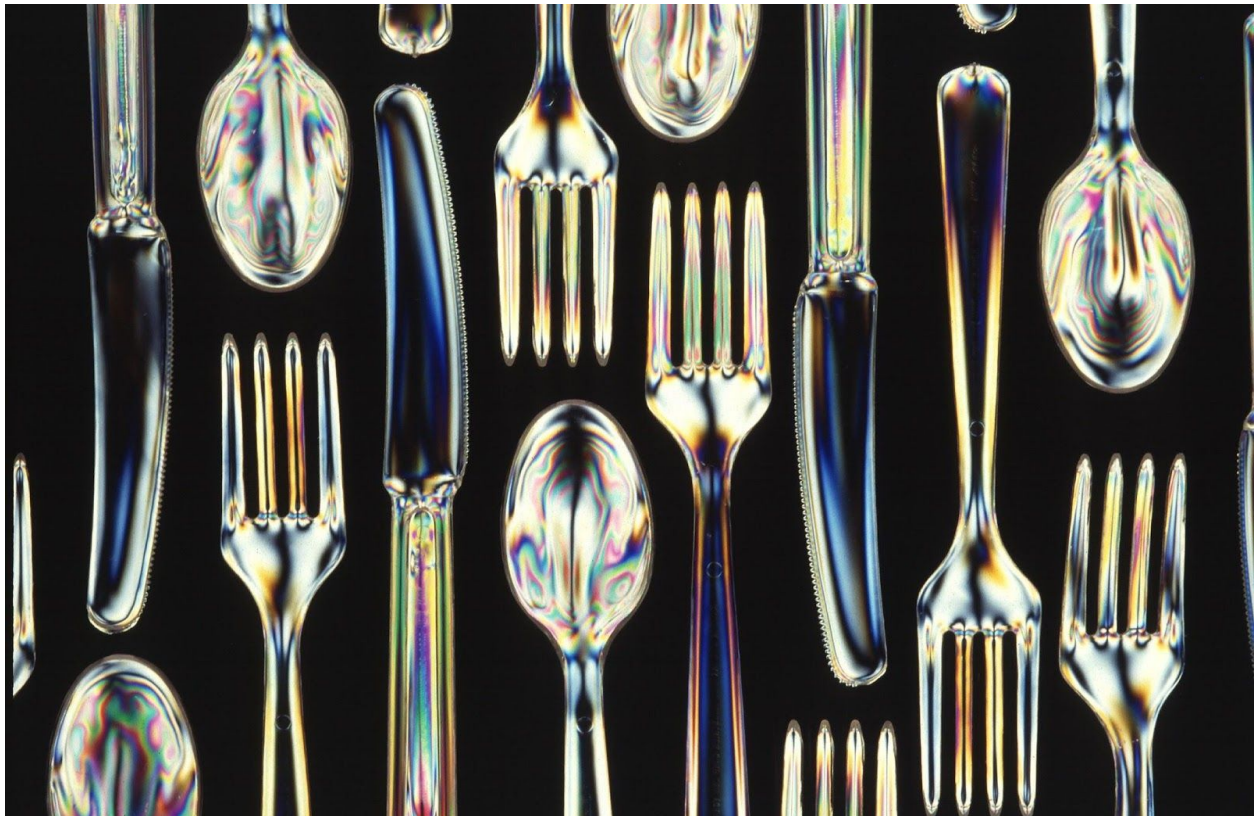
United States due to a larger amount of greenhouse gas emissions in other areas, such as transportation and power plants, in comparison to other nations.

The Results of Removing Plastic Utensils from Our Cafeteria

Elizabeth Weise

This scholastic year, in response to the large amount of plastic cutlery used in our cafeteria, Convent of the Sacred Heart made the decision to remove plastic utensils from our cafeteria in order to produce less plastic waste. While this change has led to an enormous decrease in plastic waste in our school, there have been various mixed reactions to it, and there is still much more we can do to improve.

In the Upper and Middle schools and the Faculty, this change has had an incredible positive impact. Last year the majority of students and faculty used plastic utensils on a near-daily basis. In comparison, they are rarely used this year. However, many students and faculty have found this change to be inconvenient. This is because those who eat outside the cafeteria need to return their utensils back after finishing. Despite this frustration, the majority of students and faculty feel that the enormous benefit to the environment outweighs this inconvenience.



Although this new policy has had a large positive impact on the majority of the school, the Lower School still uses a large amount of plastic. Because they do not eat in the cafeteria, the majority of these students still use plastic. Thus, despite Sacred

Heart's recent improvement in plastic usage, there is still a long way to go until we can hopefully eradicate plastic cutlery within the school.

An Overview of the UN Climate Talks

Elizabeth Weise

World Leaders are currently gathering in Poland to discuss the issue of global warming. Recently, a UN climate report found that the conditions surrounding global warming are increasingly dire, warning of the disastrous consequences of disease, flooding, and more that would ensue if the earth's temperature increased by more than 1.5 degrees Celsius. However, within these negotiations, it is incredibly difficult for

world leaders to come to an agreement. This issue pits nations who are prepared to change their policies to prevent this continues increase in temperature versus those who only recently acknowledged this phenomena. Furthermore, the issue of climate change impacts each nation differently, as various factors such as wealth, geography, population, and economic system come into play. For example, Bangladesh's electrical infrastructure was only completed fairly recently, and thus it is more difficult for them to completely rewire this system to become more eco-friendly. The land surrounding city of Calcutta in India is incredibly susceptible to flooding, yet lacks the funding needed to protect these areas. In comparison, Houston is also susceptible to flooding, yet is already being partially reconstructed to endure natural disasters. Finally, countries like Saudi Arabia, who are dependent economically on oil struggle to accept the necessary policy changes to curb global warming.