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Plastic Background

Imagine a world where the average human had a lifespan of 450 years. At the rate people around the world are expanding their families today, It's safe to assume that we would quickly overpopulate the planet– causing it to be uninhabitable. Shockingly enough, this is around how long plastic stays in our environment for. This synthetic material multiplies at a much higher rate than we do, producing 83 pounds per person and roughly 310 million tons each year (Hawken, 2017). It's been around since the 1800s and it will soon overpopulate, just like we would.

History:

Ironically enough, the creation of plastic started with humans causing elephants to be endangered. It was scary for wildlife because elephants were facing extinction if demand for their ivory kept up at the same rate. The same would occur for certain turtles, whose shell was being used for combs (Science Museum, 2019). Items like piano keys, jewelry, artwork, billiard balls, etc were being made with ivory, so a solution was necessary. Sure enough, a chemist from the UK named Alexander Parkes was able to create the cheap substitute, and eventually it became widespread throughout the world. Others modified the product, and now we see it in our everyday lives no matter where you go. Restaurants, universities, and even pantries hold plastic and because it has crept into businesses everywhere, the glistening city of Pittsburgh has been tarnished.

Current State:

In today's world, it is very easy to get overwhelmed with thinking of potential threats to humanity; since tragedies constantly flood the news. Pittsburgh is no exception to this, since "In 2021, PennEnvironment reported that it found microplastics in 100% of tested Pennsylvania waterways" (Gratzinger, 2022, para. 8). With that being said, these microplastics being found harm us, even when we don't see it. Our wild life is crucial to our environment, so when they go down, we go with them. A recent study alarmingly points out that plastic has been found in 90 percent of the tested seabirds and 100% of the turtles (Lindwall, 2020).

On a brighter note, Pittsburgh happens to be a pretty sustainable city compared to most. Their most recent improvement was their ban of single use plastic bags in places like grocery stores. This was supposed to go into effect April 13 of this year, however as of March 23 it has been pushed back until mid october. Pittsburgh plans to implement this plan in order to "'curtail litter, mitigate stormwater risk, reduce the amount of microplastics in our soil and water, improve the City's recycling efficacy, and begin to break our dependence on fossil fuel-based products"' (Lindwall, 2020). I would say that the legislators in Pittsburgh are putting in effort in order to reduce the amount of plastic being planted in our environment, but we are only at the beginning of this long road.

Main Contributors:

Pittsburgh is known to be an entrepreneur's place of interest because of how successful small businesses are. Along with this, businesses from all around the world sell products in the City of Bridges, often containing some sort of plastic packaging. Larger corporations withhold the title of largest contributors, due to the mass production of whatever it is they are selling. Companies like Amazon, or surprisingly Coca Cola, who produces three million tons of plastic packaging each year, which is the equivalent to 200,000 plastic bottles per minute (Lindwall, 2020). Like I've said before plastic sticks around for nearly 500 years, and with production this fast from just one company, we may be heading down a slippery slope.

Potential Paths Forward:

One of the most powerful issues within the plastics industry is how convenient their product is for people. Whether it's the single use plastic in shopping bags or harder plastics like storage bins or tupperware containers, there's no denying that plastic makes everything much easier. A local Pittsburgh media source says it best when explaining that "As long as people buy these products, they'll end up in our rivers" (Zuidema, 2019, para. 7). The consumption rates around the world are fueling the fire of plastic production because of the amount companies buy to run their businesses. The only way to stop consumers from purchasing plastic would be to get rid of it entirely. With Pittsburgh's initiative to ban single use plastic bags, they have already started to take steps in this direction, however it's going to take more than just plastic bags to do the trick.

Another interesting proposal I've read about has been the use of bioplastics. These are alternatives to petroleum based plastics that instead are made out of biodegradable biological substances. This will reduce emissions, and since bioplastics can be swapped in for plastic, they will easily benefit the planet due to the demand of plastic (Hawken, 2019). It shocks me to see how different solutions have been offered, yet there is minimal action being taken in this direction. The city of Pittsburgh is lacking countless aspects of the nurture it needs, and plastic is effectively dulling the safe feel Pittsburgh has provided for decades.

Although Pittsburgh may not be top tier in sustainability, the effort is being made toward a cleaner future with their single use plastic bag initiative. There is plenty of work to come in the future, with new ideas forming periodically. The bright city has succumbed to the plastic pollution that most cities do, but the only way to combat this is through creation and innovation. Plastic is no joke, and it stays for 5 times longer than we do, so we need to start implementing before we lose what we're living for.

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