

Environmental Problems Caused By Plastic Pollution

Johnny Geurdes^{*}

Department of Ecology and Evolutionary Biology, University of Michigan, Michigan, USA

DESCRIPTION

Plastic pollution occurs when synthetic particles of plastic accumulate in the environment to the point that they endanger wildlife, habitats, and human population. Bakelite's introduction of genuinely synthetic plastic resins into international commerce in 1907 ushered in a revolution in materials. Plastics have become chronic pollutants in a wide range of environmental niches by the end of the twentieth century, from Mount Everest to the ocean's depths. Plastics have got quite a bit of press lately as a major source of pollution, whether they're mistaken for food by animals, flood low-lying areas by clogging drainage systems or just produce a lot of aesthetic blight. Plastic is a polymeric material, which means it contains very large molecules that resemble long chains with an infinite number of interconnecting links. Natural polymers such as rubber and silk are plentiful, but they have not been connected to pollution since they do not persist in the environment. Today, however, the ordinary consumer is exposed to a variety of plastic materials that were designed particularly to combat natural decay processes materials derived mostly from petroleum that may be molded, cast, spun, or coated as a coating. Synthetic plastics tend to remain in natural environments because they are mostly non-biodegradable. In addition, many lightweight single-use plastic items and packaging materials, which account for about half of all plastics produced, are not stored in containers for eventual disposal in landfills, recycling sites, or incinerators. Instead, they are inappropriately disposed of at or around the point where their utility to the customer has expired. They harm the environment as soon as they are dropped on the ground, flung out of a car window, heaped into an already full garbage receptacle, or mistakenly swept away by a gust of wind. In many areas of the world, landscapes strewn with plastic packaging have become the norm. Despite the fact that cities create the most garbage, research from around the world has found that no single country

or demographic group is the most responsible. Plastic pollution has a wide range of sources and effects. According to the trade association plastics Europe, global plastic production increased from 1.5 million metric tons (roughly 1.7 million short tons) per year in 1950 to an estimated 275 million metric tons (roughly 303 million short tons) by 2010 and 359 million metric tons (nearly 396 million short tons) by 2018. Countries with ocean coastline annually discard between 4.8 million and 12.7 million metric tons (5.3 million and 14 million short tons) into the oceans. Plastics have a poor recovery rate when compared to materials often used in the first half of the twentieth century, such as glass, paper, iron, and aluminum. Because of considerable processing challenges such as a low melting point, which prevents impurities from being driven off during heating and reprocessing, they are relatively inefficient to reuse as recycled scrap in the production process. Most recovered plastics are subsidized below the cost of raw materials through different deposit systems, or recycling is simply required by law.

CONCLUSION

Given the global amount of plastic pollution, the expense of removing plastics from the environment would be prohibitive. As a result, the majority of solutions to the plastic pollution problem focus on preventing improper disposal or even prohibiting the use of particular plastic products in the first place. Litter fines have proven difficult to enforce, but levies or outright bans on foamed food containers and plastic shopping bags, as well as deposits recovered by taking beverage bottles to recycling centers, are increasingly popular. EPR schemes hold manufacturers of particular commodities responsible for constructing infrastructure to collect and recycle the goods they create. Governments and the general public are becoming more aware of the terrible repercussions of plastic pollution, and innovative solutions, such as increased usage of biodegradable plastics and a "zero waste" attitude, are being accepted.

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Correspondence to: Dr. Johnny Geurdes, Department of Ecology and Evolutionary Biology, University of Michigan, Michigan, USA, E-mail: JohnnyGeurdes@calsu.edu