



Impact of Plastic and its Effect on the Environment

Olivier Terada*

Department of Earth and Environmental Sciences, Dalhousie University, Halifax, Canada

DESCRIPTION

Plastic pollution has become one of the most critical environmental issues as the capacity of the globe to handle the rapidly increasing output of disposable plastic goods gets overburdened. Plastic pollution is especially obvious in underdeveloped Asian and African nations when garbage collection services are either inadequate or nonexistent. Because it has spread so far the United Nations is working to draught a global treaty against plastic waste. Plastics made from fossil fuels have been used for a little over a century. After World War II the production and creation of tens of thousands of new plastic goods skyrocketed radically altering modern society to the point where life without plastics is now incomprehensible. Plastics transformed medicine by enabling life-saving technologies, enabling space flight, lightening automobiles and aircraft, reducing fuel use and pollution and saving lives with helmets, incubators and equipment for clean drinking water.

However, the conveniences that plastics provide have given rise to a culture of single-use plastics that make up 40% of the plastic produced annually exposing the material's downside. Many of these products such as plastic bags and food wrappers have a short shelf life yet can persist in the environment for hundreds of years. The majority of it comes from the land which is the last place on Earth where plastic garbage may be disposed of. The world's largest rivers act as conveyor belts picking up trash as they travel downstream and transporting it to the ocean. Many floating plastic waste fragments persist in coastal waterways when they are at sea. However, if it is swept up in ocean currents it can go all over the planet.

Scientists discovered plastic artefacts from Russia, the United States, Europe, South America, Japan and China on Henderson Island an uninhabited island in the Pitcairn Group that is situated midway between Chile and New Zealand. They were carried by the South Pacific gyre a cyclical ocean current to the South Pacific.

Microplastics

After reaching the ocean, sunshine, wind and wave action

Microplastics reduce plastic garbage to tiny particles frequently smaller than one-fifth of an inch. These so-called microplastics are dispersed throughout the water column and have been discovered in every region of the world from the highest peak, Mount Everest, to the deepest chasm, the Mariana Trench. Microplastics are disintegrating into ever-tinier fragments. In the meantime plastic microfibers have been discovered in public water systems and in the air.

Millions of animals, including fish, birds and other marine life are killed by plastic each year. Around 700 species some of which are endangered are known to have been harmed by plastics. Seabirds of almost every species eat plastic. Entanglement or malnutrition is the main causes of animal deaths. Animals including seals, whales, turtles and others are strangled by discarded six-pack rings or fishing gear. Microplastics have been found in more than 100 aquatic species, including fish, shrimp and mussels that are intended for our dinner plates. These minute particles frequently pass through the digestive tract and are excreted without any negative effects. But it has also been discovered that plastics can penetrate organs or obstruct digestive tracts which can result in death. Plastics filled stomachs limit the desire to eat which results in hunger.

Land-based animals such as elephants, hyenas, zebras, tigers, camels, cattle and other large mammals have swallowed plastics often to their detriment. Assessment has also revealed liver damage, cell disintegration and problems with the reproductive systems which cause some species like oysters to lay less egg. The consumption of nanofibers by larval fish during their first few days of life raises new concerns about the impact of plastics on fish populations.

Stemming the plastic tide

It is challenging if not impossible to reclaim plastic debris once it has entered the water. Large bits of plastic such foam cups and food containers can be successfully removed from inland waters by mechanical systems. However, as plastics degrade into microplastics and float throughout the ocean's water column it is nearly impossible to recover them.

Correspondence to: Olivier Terada, Department of Earth and Environmental Sciences, Dalhousie University, Halifax, Canada, Email: oliver@tera.ca

Received: 02-Aug-2022, Manuscript No. JPEB-22-18188; **Editor assigned:** 05-Aug-2022, PreQC No. JPEB-22-18188 (PQ); **Reviewed:** 19-Aug-2022, QC No JPEB-22-18188; **Revised:** 26-Aug-2022, Manuscript No. JPEB-22-18188 (R); **Published:** 02-Sep-2022 DOI: 10.35248/2157-7463.22.13.478.

Citation: Terada O (2022) Impact of Plastic and its Effect on the Environment. J Pet Environ Biotechnol. 13:478.

Copyright: © 2022 Terada O. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

According to many scientists and environmentalists including the National Geographic Society the solution is to stop plastic garbage from entering rivers and seas in the first place. This might be achieved through enhancing recycling and waste

management systems improving product design to account for the transient nature of disposable packaging and reducing the production of superfluous single-use plastics.