Effect of Ocean Pollution

Ocean pollution is a current obstacle that we face today in the environmental world. Specifically, ocean pollution is a combination of chemicals and trash, most of which comes from land sources and is washed or blown into the ocean. It is a significant environmental issue that threatens our plant's health and well-being. The repercussions can take many forms including jeopardizing the safety of humans, the destruction of oceanic ecosystems, and the consumption of micro plastics in our everyday lives. However, through prevention and heightened awareness ocean pollution could be seriously decreased.

Oceans account for 70% of the surface of the planet and play a key role in the health of our ecosystem. There is an abundance of things that we as humans rely on that in turn rely on the ocean and ocean as an ecosystem. A major way that oceans are contaminated is by the runoff of excess chemicals. This is dangerous as it happens so frequently and with such force that it can destroy whole areas. Chemical contamination, or nutrient pollution is concerning for health, environmental, and economic reasons. This type of point and non-point pollution occurs when human activities, use of fertilizer on farms and surface water discharges lead to chemicals into our waterways the ultimately flow into the oceans. The increase of concentration of chemicals in the coastal ocean promotes the growth of algal blooms, which can be toxic to wildlife and harmful to humas. Algal blooms are when there is a rapid increase of algal accumulation in the water, usually due to the addition of a fertilizer, that consumes all the nutrients and resources from the organisms. This ends in a complete destruction because the algal bloom will kill the rest of the ecosystem, and then it will not be able to survive on its own and eventually die. Additionally, PFAS and PFOS, the forever chemical, are being ingested by fish and eaten by humans. The most alarming thing about these chemicals is that they are unable to break down, therefore, they accumulate in our everyday substances. Most likely, we were all exposed to these substances even before birth and continue to interact with these chemicals for the entirety of our lives. Oceans that are flooded by chemicals and trash continue to be a growing problem in our world today.

Marine trash encompasses all manufactured products, most of them plastic, that end up in the ocean. Littering, storm winds, and poor waste management practices contribute to the accumulation of this debris in the ocean. The trash poses danger to both humans and animals. Fish become tangled and injured in the trash, and some animals mistake items like plastic bags for food and eat them. Plastic does not fully break down in the ocean, instead it becomes micro plastic. They are small particles of plastic, invisible to the human eye, but very much so real in the implications that it has. This can affect humans as we consume many organisms from the ocean who have eaten garbage and micro plastics throughout their lives. When we do this, we are transferring harmful products into our systems from the fish, crustations, and other things we eat.

Solutions to marine pollution include prevention, cleanup, and better integrated solid waste management plans. The reduction and recycling of plastic is the first step worldwide. Participating in beach clean ups, spreading awareness, and minimizing your impact on the environment will help reduce ocean pollution. Changing society’s approach to plastic use will be a long and economically challenging process that will eat up time and resources but would be a game changer in the world of ocean pollution. The Pacific Garbage Patch is one example of such a collection with plastics and microplastic floating on and below the surface. Cleaning up may be impossible for some items, and we may never be able to retrieve all the pollution that we have put into the ocean. However, we can prevent more plastic, trash, and chemicals from entering in the first place.

By Chloe Moser