

Life Below Water – Dasha Hudson

My chosen Global Goal promotes conservation and sustainable use of the oceans. I have chosen this subject because I believe young people should know more about life below water, the devastating effect our way of life has on marine environment and how we all rely on the ocean for our survival.

The ocean covers 70% of the surface of our planet, it regulates our climate and weather patterns by transporting heat from the equator to the poles. Over 50% of the world's oxygen is produced in the ocean and we rely on aquatic life for food and even medicine. Millions of people are reliant on employment from aquatic trades.

Many of us are aware that the coral reefs have become a victim of global warming and much of the coral and species which rely on coral have perished. Not many are however aware of the marine phytoplankton, the smallest organisms in the ocean, which are not only at the bottom of the marine food chain but are also responsible for gobbling up greenhouse gases. The ocean absorbs approximately 40% of the CO₂ we produce. Phytoplankton convert the CO₂ into oxygen, or they die burying this at the bottom of the ocean. I was astonished to find out that studies suggest the number of these tiny helpers has been reducing at a rate of 1% per year. Research has found that phytoplankton numbers is more likely to reduce in the areas of the ocean which are warming, and it is likely that global warming is the cause of the decline in the numbers of these species. Dwindling numbers of phytoplankton will in turn result in higher levels of CO₂. The world will become even warmer, and this will continue to wipe out phytoplankton even further, leading to potentially devastating effect for our world.

Other areas in the world in great need of our help include the Pacific Ocean. Here, there are over 2 trillion plastic pieces. This polluted water then circulates around the world, and pollutes other, cleaner waters disturbing wildlife, and the environment in which animals and humans live alike. The top 5 plastic polluters in the world are China, Indonesia, Philippines, Vietnam, and Thailand. These areas generate the most air and ocean pollution, however these are not the only ones at fault. If we were to stop buying products with reusable packaging, and eliminated all non-essential use of plastic, then we would save hundreds of marine species from ingestion and entanglement of plastics. Researchers predict that by 2050 if we do not change our ways, there will be more plastic in the oceans than fish, this would then affect the amount of

carbon dioxide in our atmosphere (as oceans dissolve around 40 %). Other issues include no fresh water and sea levels rising. It is predicted that by 2100, sea levels will have risen to 111cm, this could potentially wipe out whole countries. According to new research published by scientific magazine Nature Communications, 200 million people in the world will live below the sea level line by 2100.

It is easy not to concern ourselves with the world around us. The way in which we live our lives is filled with the hungry greed for more, without much consideration for our planet. This results in destruction of our planet and must change!

There is plenty we can all do to help the oceans. In addition to what countries are able to do to support life under water through investments in research and sustainable use of our oceans, I believe it is up to each person to make right choices in their everyday life to make a difference. We must at least try follow these easy steps:

- Minimise the use of single use plastic and do not use plastic bags as these are major cause to marine pollution.
- Do not buy bottled water. Tap water is perfectly safe to drink and it does not involve plastic polluting our environment.
- Do not waste water – have showers, not baths; turn off water when brushing teeth.
- Buy ocean friendly nontoxic products such as soap and washing up liquid which cause least amount of pollution to our oceans.
- This time of the year we use large quantities of sun cream and, if budget allows, we should consider ocean friendly sun creams. These do not contain oxybenzone and octinoxate, tons of which end up in coral reefs every year.
- Watch what we put down our sinks as wastewater will find its way into our water systems and will carry pollutants such as glitter and other microplastic into the environment.
- Buy only sustainably produced fish as such produce is farmed in an ethical way protecting ocean's ecosystems and allows fish numbers thrive by avoiding overfishing.
- Reduce fish consumption and eat more plant-based diet. If buying fish, select fish lower down the food chain such as muscles, mackerel not salmon or tuna. When industrial fishing methods are used, smaller fish,

crustaceans, molluscs are caught in the nets and some of these end up not being used. Purchasing these will reduce the need to fish for larger fish and bottom trawling which also destroys aquatic environment.

- Reduce our carbon footprint to prevent overheating of our oceans. We can all make our energy use more sustainable – eat more plant-based meals, buy vintage clothes, less driving, use recycled products and buy energy efficient appliances.
- Take part in a clean-up project near your home. It can be a river, canal, or the sea.

The importance of our oceans is recognised worldwide. The world celebrates World Oceans Day on the 8th of June. This initiative was started in 2008 by United Nations and each year this day has different themes, which inform the public of the impact of human actions on the oceans. This year's theme is "The Ocean: Lives and Livelihoods".

We share our planet with countless amount of wildlife including marine species and ecosystems. Our survival as well as prosperity is dependent on sustaining and conserving our oceans and it is up to each one of us to be an ocean hero.

By Dasha Hudson