

## Biodiversity

This course is about the biological diversity of different species and how they are spread out around the world. It also gives information on how they may be affected by different global changes whether natural or caused by humans. The challenge of keeping the nature of the world safe is a big problem for humans as they are ignorant towards the impact they are having on the world. It is very difficult for us to keep track of how to save and preserve all of the species as there are tens of millions of species each with variants of thousands to millions of genes.

In my opinion, humans have got a large impact on the biodiversity of the world as they continue to pretend to be unaware of the effects of their actions. Last Summer was very hot due to global warming caused by human activities such as burning fossil fuels, deforestation and agriculture. This caused lots of devastation in many places of the world. One example I have viewed is an island in the arctic which has been largely destroyed due to high temperatures melting the permafrost. The island of Qikiqtaruk near Canada experienced multiple landslides over a period of two weeks because wildfires in Canada brought large clouds of ash and warm temperatures which ripped the tundra off the island in more than 700 locations. For more than a decade, a group of ecologists have been observing the island and recently they noticed changes but didn't expect anything to this extent to happen. Despite its size, the island is packed full of ecological richness and is a good environment for animals. For example, the water is teeming with beluga whales and trout and on land is one of the only places where black, grizzly and polar bears cross paths. The land is thickly carpeted with over 200 species of wildflowers, grasses and shrubs so it is a good place for animals to live and breed. The island also uses warm temperatures to its advantage as the number and diversity of plants will continue to grow. However, this will negatively affect the animals that rely on seasonal change in the weather and wildlife. There is now large half-moon craters in the land called thaw slumps which are caused by the permafrost underneath the land melting and becoming too weak to hold up the soil and plants above. Permafrost thaws across the globe are destroying housing and infrastructure and disrupting ecosystems. There is more carbon stored in permafrost than in the rest of the atmosphere. Therefore, when it melts, it contributes massively to global warming, so the melting of the island does not just affect the local area. The constant landslides are only the start of difficulty coming in the future for this island. Humans are meant to be the protector of land and help the animals, but they are causing them to suffer. This scenario is only one of thousands which is decreasing biodiversity across the world.

However, even though humans have the largest impact on the world, they are also the only ones that can fix it so in the recent Cop29 meeting in Azerbaijan, the countries discussed many ways of how to help the world and protect biodiversity. They came up with many ideas including new ways of trading sustainably and using less carbon. The Governments agreed on

ways to create, trade and register carbon emissions and reductions. It paves the way for top emitters such as Germany and Japan to buy cheap removals and reductions from decarbonisation schemes in developing countries such as renewable energy schemes, rainforest protection or tree-planting, counting them towards their own targets. Big concerns about carbon markets remain. In the run-up to Cop28 in Dubai last year, it emerged that large parts of African forest had been sold off in a series of huge carbon offsetting deals to a UAE firm overseen by a member of Dubai's royal family, prompting fears of a "new scramble for Africa" over the continent's carbon resources. This agreement allows countries to reduce their carbon use and have a smaller impact on the earth. It shows that humans are attempting to fix their mistakes and what we have done to the earth but not to a large enough extent. This meeting is a good chance for multiple views on how to become more ecofriendly to be heard and maybe taken on board. However, not enough is being done so our actions can't be reversed. This is resulting in decreased biodiversity and animals and plants are more likely to go extinct.

In conclusion, I would take this course because it has given me a wider understanding of the impact's humans have on the world, and I have become very interested in the safety and livelihoods of species across the world. In my opinion, humans have the largest impacts on the world and biodiversity in specific, but they are not doing enough to fix it. Overall, reading the information about this course has made me more aware of my actions and I would consider taking this course in the future.