The rainforest is not just a pretty face!

As well as the vivid beauty that comes with great diversity in plants and animals, rainforests also play a practical role in keeping our planet healthy.

By absorbing carbon dioxide and releasing the oxygen that we depend on for our survival. The absorption of this CO2 also helps to stabilize the Earth's climate.

Rainforests also help to maintain the world's water cycle by adding water to the atmosphere through the process of transpiration which creates clouds. Water generated in rainforests travel around the world; scientists think that moisture generated in the forests of Africa ends up falling as rain in the Americas!

Habitat for animals and plants

Tropical rainforests contain over 30 million species of plants and animals. That's half of the Earth's wildlife and at least two-thirds of its plant species! There are also many more thousands of rainforest plants and animals species still waiting to be discovered.

Indigenous people's ancestral territory

Many indigenous people have been living in harmony with the rainforest for thousands of years, depending on it for their food, shelter and medicines. When oil and logging companies come to remove vast areas of forest, they bring diseases which the indigenous people have no resistance to, threatening their survival. Often they are also forced to move away from their homes to unfamiliar places, sometimes even being killed in the process.

Climate regulation

Rainforests store water like a huge sponge. In fact, it is believed that the Amazonian forests alone store over half of the Earth's rainwater! Rainforest trees draw water from the forest floor and release it back in to the atmosphere in the form of swirling mists and clouds. Without rainforests continually recycling huge quantities of water, feeding the rivers, lakes and irrigation systems, droughts would become more common, potentially leading to widespread famine and disease.

Preventing soil erosion

Surprisingly, soil in the rainforest is very poor in nutrients. This is because the nutrients are stored in the vast numbers of trees and plants rather than in the soil. Tree roots bind the soil together, while the canopy protects the soil from heavy rains. When a tree dies and its trunk falls to the forest floor, it decays and the nutrients it contains are recycled. However, if trees are removed from the forest, the nutrients are removed with it. The unprotected soil is then simply washed away in heavy rains, causing blockages and floods in lowland rivers, while leaving upland rivers dry.

Rainforest pharmacy

It may surprise you to know that more than 25% of our modern medicines originate from tropical forest plants. Even so, we have only learned how to use 1% of these amazing plants, so imagine the possibilities if we could experiment with the other 99%!