



## Rainforests rule!

by Julie Bray

A world like no other – perhaps this is the best way to describe the world of the rainforest. No rainforest is exactly the same – yet most rainforests are now distributed in the small land area 22.5 degrees north and 22.5 degrees south of the Equator, between the Tropic of Capricorn and the Tropic of Cancer. You can find tropical rainforests in South America and Indonesia. Other rainforests flourish further from the Equator, in Thailand and Sri Lanka.

Despite occupying a relatively small area, rainforests have a colossal role to play in maintaining the world as we know it. Tropical rainforests are home to a rich, colourful variety of medicinal plants, food, birds and animals. Can you believe that a single bush in the Amazon may have more species of ants than the whole of Britain! 480 varieties of trees may be found in just one hectare of rainforest. These forests sustain around 50% of all the species on Earth, and offer a way of life to many people living in and around the forest.

Rainforests are the lungs of the planet – storing vast quantities of carbon dioxide and producing a significant amount of the world's oxygen. Rainforests have their own perfect system for ensuring their own survival; the tall trees make a canopy of branches and leaves which protect themselves, smaller plants, and the forest animals from heavy rain, intense dry heat from the sun and strong winds.

Amazingly, the trees grow in such a way that their leaves and branches, although close together, never actually touch those of another tree. Scientists think this is a deliberate tactic to prevent the spread of any tree diseases and make life more difficult for leaf-eating insects like caterpillars. To survive in the forest, animals must climb, jump, fly or glide across the gaps. The ground floor of the forest is not all tangled leaves and bushes, like in films, but is actually fairly clear. It is where leaves decompose into food for the trees and other forest life.

They are not called rainforests for nothing! Rainforests can generate 75% of their own rain. At least 80 inches of rain a year is normal – and in some areas there may be as much as 430 inches of rain annually. This is real rain – your umbrella may protect you in a shower, but it won't keep you dry if there is a full rainstorm. In just two hours, streams can rise ten to twenty feet. The humidity of large rainforests contributes to the formation of rainclouds that may travel to other countries in need of rain.

Worryingly, rainforests around the world are disappearing at an alarming rate, thanks to deforestation, river pollution, and soil erosion as land is being claimed for agriculture and trees are felled for wood. A few thousand years ago, tropical rainforests covered as much as 12% of the land surface on Earth, but today this has fallen to less than 5.3%.

We can only hope that the world governments work together with environmentalists and businesses to use their environmental knowledge and power to preserve the rainforests – awe-inspiring, beautiful and vital for our existence.