STRATA OF TROPICAL RAINFORESTS

Scientists divide the rainforests into different strata (or zones). These strata differ in many ways including temperature, the amount of sunlight that they receive, the wetness of the environment, and the amount and types of life forms living in it. Starting from the top, four major zones can be identified and these are:

EMERGENTS

The emergent zone lies at the very top of the rainforest trees. The tallest trees in the rainforest are usually over 50 metres high. It is the habitat for many birds and insects.

CANOPY

The canopy is the name given to the upper parts of the trees (about 20 to 40 metres tall). It consists of a sea of leaves blocking out the sunlight preventing it from reaching the lower layers. The canopy contains over 50% of the rainforest’s wildlife. This include birds (like the scarlet macaw, the cuckoo, and the hornbill), mammals (like the howler monkey, and the orangutan) and reptiles (like snakes and lizards). Plants in the canopy include thick, snake-like vines and epiphytes (like mosses, lichens, and orchids) which grow on trees in search of the sunlight.

UNDERSTORY

The understory is a dark, cool environment that is under the leaves but over the ground. This part of the rainforest has so little light that plant growth is severely limited. There are short, leafy, mostly non-flowering shrubs, small trees, ferns, and vines (lianas) that have adapted to filtered light and poor soil. Examples of plants include ferns, palms, philodendrons and heliconias. Animals that live in the under story include insects (like beetles and bees), arachnids, snakes, lizards, and small mammals (like the kinkajou) that live on tree bark. Larger animals like jaguars spend a lot of time on branches in the understory, surveying the area, looking for prey.

FOREST FLOOR

The forest floor is usually dark and damp. It contains a layer called litter which consists of rotting tree branches, leaves and dead animals. This decomposes rapidly to form a thin layer on the forests floor called humus, which is rich in nutrients. This zone of the rainforest is teeming with animal life, especially insects and arachnids (like tarantulas). People and the largest animals in the rainforests generally live here, including gorillas, anteaters, wild boars, tapirs and jaguars.

From The Rainforest Foundation UK, Education Pack 3 and 4.