Abby Lodge
Cloud Forests

Cloud forests are found in mountainous areas and are very different from lowland rainforests. They get their name from the constant presence of clouds or mist that cover the vegetation. Cloud forests consist of a single story of trees or trees of the same height and the high moisture levels in these forests promote a rich biomass. Cloud forests are rare, as they make up just one percent of the world's woodlands and are found predominantly throughout the tropics. There are 272 cloud forests in the Caribbean and Latin America. The appearance and form of cloud forests very depending on altitude, temperature, cloud cover, soil conditions, and exposure to prevailing winds. Vegetation levels are stunted because of reduced photosynthesis due to lower levels of light penetrating through the clouds.

The altitudes at which cloud forests are found vary considerably – on large inland mountains they may found anywhere between 2002 to 3000 meters, whereas on coastal mountains or those of small oceanic islands the zone can descend to 1200 meters. All cloud forests have an important role in stabilizing water quality and maintaining the natural flow patterns of the streams and rivers originating within them. Epiphytes make up about one quarter of all cloud forest species and they capture water directly from fog and clouds. Cloud forests are also sites of rich biodiversity and provide a habitat for many of the world's threatened and endemic species. Ten percent of the world's endemic bird populations are found in cloud forests.

Due to their uniqueness, cloud forests have also been called sky islands. I was very surprised to learn that cloud forests are also the natural habitat of the wild relatives of many crop species such as tomatoes, avocados, and coffee – they are therefore a critical gene pool which will allow for the continued improvement of these crops. Cloud forests are also very important for ecotourism.

Cloud forests face many of the same threats as other tropical forests for their unique ecology and their location on mountain slopes make them particularly vulnerable to some deforestation forces and especially to climate change. Infrastructural development is another cause of great concern for the survival of cloud forests. The construction of roads through the forests and the laying of pipelines and powerlines have led to the fragmentation of habitats – this impacts the ecology of the remain segments of cloud forests. There are also natural threats to cloud forests – a significant one being an alien species that invades habitats – for example, the Australian tree, commonly called the wild orange.