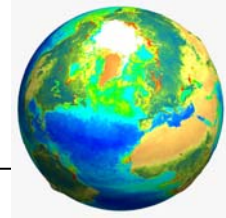


Tropical Rainforests Fact Sheet



Rainforests cover 2% of the Earth's surface, or 6% of its land mass, yet they house over half the plant and animal species on Earth. They originally covered at least twice that area.

Tropical rainforests are defined primarily by two factors: location (in the tropics) and amount of rainfall they receive. Rainforests receive from 4 to 8 meters of rain a year -- 5 meters of rain falls on the rainforests of Borneo each year, five times as much as on the state of New York. The heavy vegetation blocks the rainfall, and water reaches the forest floor by rolling down branches and trunks or as a fine spray. Another distinctive characteristic is that rainforests have no "seasonality" -- no dry or cold season of slower growth. (Myers, Norman, The Primary Source)

Tropical rainforests are the Earth's oldest living ecosystems. Fossil records show that the forests of Southeast Asia have existed in more or less their present form for 70 to 100 million years. (Myers, Norman, The Primary Source) Tropical rainforests are the Earth's oldest living ecosystems.

Rainforests are being destroyed at a staggering rate. According to the National Academy of Science, at least 50 million acres a year are lost, an area the size of England, Wales and Scotland combined.

All the primary rainforests in India, Bangladesh, Sri Lanka and Haiti have been destroyed already. The Ivory Coast rainforests have been almost completely logged. The Philippines lost 55% of its forest between 1960 and 1985; Thailand lost 45% of its forest between 1961 and 1985.

Despite the small land area they cover, rainforests are home to about half of the 5 to 10 million plant and animal species on the globe. Rainforests also support 90,000 of the 250,000 identified plant species. Scientists estimate that there are at least 30,000 as yet undiscovered plants, most of which are rainforest species. (Myers, Norman, The Primary Source)

One fourth of the medicines available today owe their existence to plants. Seventy percent of the plants identified by the National Cancer Institute as useful in cancer treatment are found only in the rainforest. Drugs used to treat leukemia, Hodgkin's disease and other cancers come from rainforest plants, as do medicines for heart ailments, hypertension, arthritis and birth control. Yet fewer than 1% of tropical forest species have been thoroughly examined for their chemical compounds. (Myers, Norman, The Primary Source) A typical four square mile patch of rainforest contains as many as 1500 species of flowering plants



Many of the foods we eat today originated in rainforests: avocado, banana, black pepper, Brazilian nuts, cayenne pepper, cassava/manioc, cashews, chocolate/cocoa, cinnamon, cloves, coconut, coffee, cola, corn/maize, eggplant, fig, ginger, guava, herbal tea ingredients (hibiscus flowers, orange flowers and peel, lemon grass), jalapeño, lemon, orange, papaya, paprika, peanut, pineapple, rice, winter squash, sweet pepper, sugar, tomato, turmeric, vanilla, and Mexican yam. The wild strains still in the rainforests of many of these plants provide genetic materials essential to fortify our existing agricultural stock. Many other rainforest plants have great promise to become other staple foods. (Caufield, Catherine, In the Rainforest)

While it's true that rainforests produce vast amounts of oxygen through photosynthesis, they consume as much as they produce in the decay of organic matter. Rainforests do affect our atmosphere and climate, but not through supplying the world's oxygen. (Caufield, Catherine, In the Rainforest)

Rainforests play a critical role in the atmosphere in part because they hold vast reserves of carbon in their vegetation. When rainforests are burned, or the trees are cut and left to decay, the carbon is released into the atmosphere as carbon dioxide (CO₂). This is the second largest factor contributing to the greenhouse effect. (Caufield, Catherine, In the Rainforest)

Four-fifths of the nutrients in the rainforests are in the vegetation. This means that the soils are nutrient-poor and become eroded and unproductive within a few years after the rainforest is cleared.

A typical four square mile patch of rainforest contains as many as 1500 species of flowering plants, 750 species of trees, 125 mammal species, 400 species of birds, 100 of reptiles, 60 of amphibians, and 150 different species of butterflies. In one study, one square meter of leaf litter, when analyzed, turned up 50 species of ants alone. (National Academy of Sciences.)

The tropics are the earth's richest natural reserves. One fifth of all the birds and plants on Earth evolved in the Amazon Basin. (Steinhart, Peter, National Wildlife Federation, Dec./Jan. 1984)

The uneven distribution of wealth and land is one major factor in the destruction of tropical forests. The World Bank estimates that of the 2.5 billion people now living in the tropics one billion exist in absolute poverty. (Raven, Peter H, Bulletin of Atomic Scientists, November 1984.)

