

Rainforests

[Rainforests](#) are very dense, warm, wet forests. They are havens for millions of plants and animals. Rainforests are extremely important in the ecology of the Earth. The plants of the rainforest generate much of the Earth's oxygen. These plants are also very important to people in other ways; many are used in new drugs that fight disease and illness.

Where are Rainforests? Tropical rainforests are [located in a band around the equator](#), mostly in the area between the Tropic of Cancer (23.5° N latitude) and the Tropic of Capricorn (23.5° S latitude). This 3,000 mile (4800 km) wide band is called the "tropics." Tropical rainforests are found in South America, West Africa, Australia, southern India, and Southeast Asia.

Strata of the Rainforest

Different animals and plants live in different parts of the rainforest. Scientists divide the rainforest into strata (zones) based on the living environment. Starting at the top, the strata are:

- **EMERGENTS:** Giant trees that are much higher than the average canopy height. It houses many birds and insects.
- **CANOPY:** The upper parts of the trees. This leafy environment is full of life in a tropical rainforest and includes: insects, birds, [reptiles](#), mammals, and more.
- **UNDERSTORY:** A dark, cool environment under the leaves but over the ground.
- **FOREST FLOOR:** Teeming with animal life, especially insects. The largest animals in the rainforest generally live here.

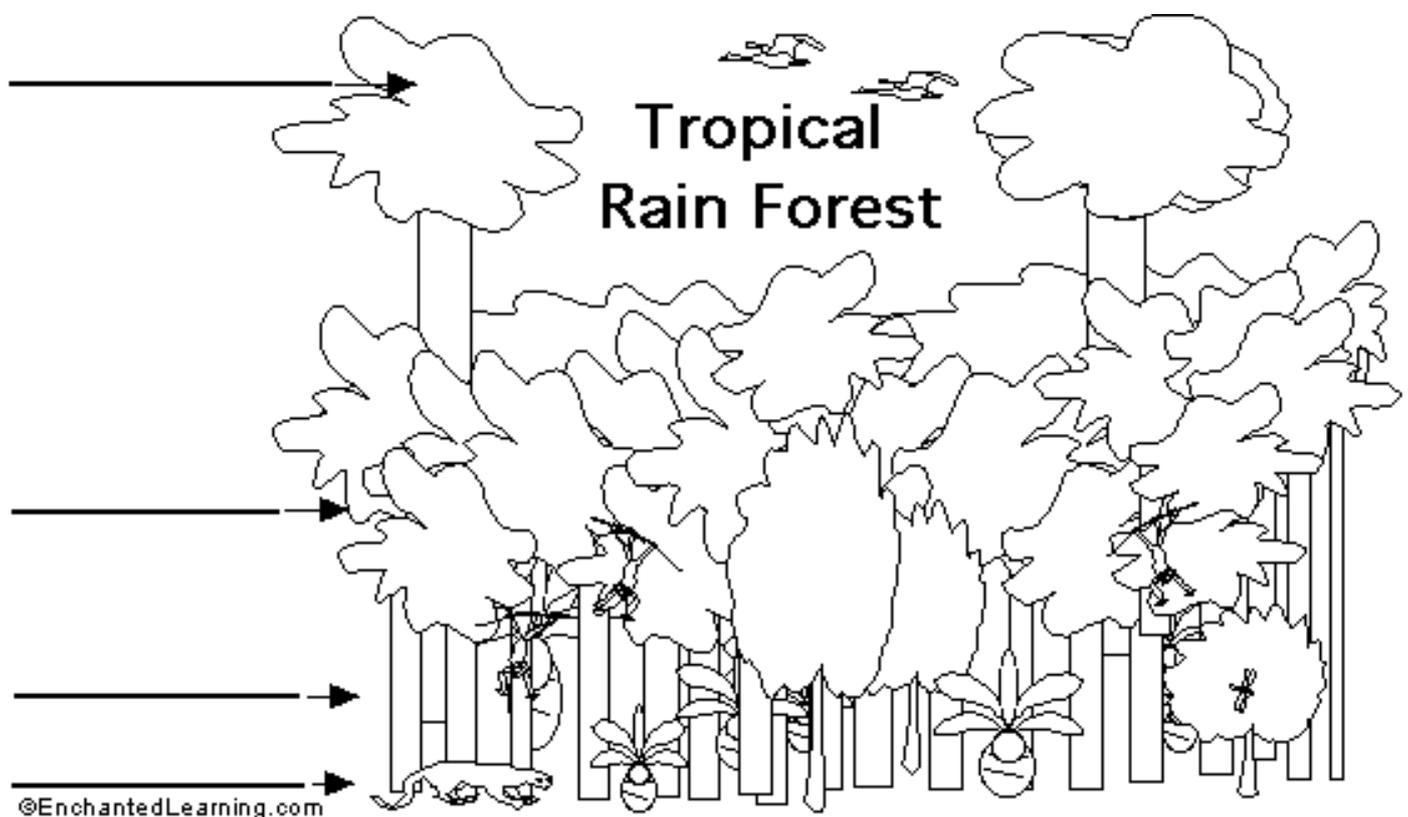
Animals that Live in Rainforests: Ridiculously huge numbers of animals live in rainforests, including microscopic animals, invertebrates (like insects and worms), fish, reptiles, amphibians, birds, and mammals. The different rainforests of the world support different populations of animals. A few animals from each rainforest are listed below:

- **South America** - insects ([morpho butterfly](#), Julia butterfly, [Monarch butterfly](#), and millions of other insects)
- mammals ([jaguar](#), [ocelot](#), didelphid opossums, sloth, [howler monkey](#), spider monkey, capybara, [many bats](#), marmosets, procyonids, peccaries)
- birds ([quetzal](#), macaw, tinamous, curassows, hoatzins, [hummingbirds](#), eagles, ovenbirds, antbirds, flycatchers, puffbirds, [toucans](#), jacamars, tanagers, tapirs, troupials, honeycreepers, cardinal grosbeaks, [xenops](#))
- [reptiles](#) ([anaconda](#), caiman, [iguanas](#), lizards, microteiid lizards, boas, and coral snakes), amphibians (poison arrow frog, etc.)
- fish (electric eel, [piranha](#)), and millions of other animals.

- **Australia** - mammals (tree kangaroo, rat kangaroo, yellow-footed Antechinus, Giant White-tailed Uromys, opossums, [bandicoot](#), [echidna](#), [duck-billed platypus](#), sugar glider, red legged pademelon)
- birds ([cassowary](#), brolga, emerald dove, orange-footed scrubfowl, Australian brush-turkey, sarus crane, gray goshawk, wompoo fruit dove, topknot pigeon, Australian king parrot, [laughing kookaburra](#), lesser sooty owl, fernwren, [barred cuckoo-shrike](#), golden whistler, etc.)
- reptiles (frilled lizard, carpet python, Green Tree Snake, Spotted Tree Monitor, Eastern Water Dragon, Boyd's Forest Dragon, Northern Leaf Tailed Gecko)
- insects ([Ulysses butterfly](#), Zodiac Moth, Union Jack butterfly, Regent skipper, Birdwing Butterfly)
- amphibians (Giant Tree frog, Striped marsh frog, Northern Barred frog, Dainty Green Tree frog), and millions of other animals.

- **Southeast Asia** - mammals ([tarsiers](#), [orangutans](#), [Siamangs](#), [gibbons](#), colobine monkeys, [tigers](#), tree shrews, [binturong](#), moonrats, most flying foxes, colugos, bamboo rats, Oriental dormice)
- birds (tree swifts, leafbirds, fairy bluebirds, fantails, whistlers, flowerpeckers, wood swallows)
- insects ([Queen Alexandra's Birdwing butterfly](#), Goliath Birdwing butterfly, Saturn Butterfly), and millions of other animals.
- **West Africa** - mammals (antelopes, [bonobo](#), [chimpanzee](#), [gorilla](#), Mandrill, scaly-tailed squirrels, otter shrews, duikers, okapi, [hippopotamus](#), Cercopithecus monkeys, bushbabies, pygmy hippo, duiker)
- birds (Congo peafowl, [African Gray Parrot](#)) and millions of other animals.

Label the different strata in a rainforest



canopy - the upper parts of most of the trees (about 65 to 130 feet or 20 to 40 m tall). This leafy environment is full of life: insects, arachnids, many birds, some mammals, etc.

emergents - the tops of the tallest trees, which are much higher than the average trees (the canopy).

forest floor - the ground - it is teeming with animal life, especially insects and arachnids, plus large animals (like anacondas and jaguars).

understory - a dark, cool environment that is under the leaves but over the ground. Most of the understory of a rainforest has so little light that plant growth is limited. There are short, leafy, mostly non-flowering shrubs, small trees, ferns, and vines (lianas) that have adapted to filtered light and poor soil.