

## Tropical lowlands

4 types of tropical ecosystems that are not wetlands

Wet forests, seasonal or dry forests, savannahs, and tropical deserts

## Tropical moist forests

where are they found ([www.mongabay.com/.../ world-rainforest-map.jpg](http://www.mongabay.com/.../world-rainforest-map.jpg))

What are they - broadleaf evergreen forests (map of world vegetation)

slide of rainforest canopy

Venezuela (map of rainforest vegetation in Venezuela- 8 interpretations)

under what conditions

slide of seasonality with latitude

slide of vegetation versus length of dry season

climate diagrams for vegetation versus dry season

climate diagram for La Selva, Costa Rica

world rainfall map

map of rainforest distribution

climate diagram map of Africa

challenges to plants and animals in tropical humid environments

benefits of tropical environment

challenges of tropical environments.

## Canopy strata

slide of strata diagram

slide of canopy layer from above

slide of canopy levels from Costa Rica

## Components of forest canopy

slide of tree buttresses

<http://www.wildsidephotography.ca/gallery/albums/Sulawesi/22033m.jpg>

slide epiphylls -

[http://www.discoverlife.org/IM/EL\\_DP/0001/320/Epiphylls\\_on\\_young\\_and\\_old\\_leaves,Brazil,EL\\_DP134.jpg](http://www.discoverlife.org/IM/EL_DP/0001/320/Epiphylls_on_young_and_old_leaves,Brazil,EL_DP134.jpg)

slide of strangler fig-

[http://home.pages.at/aotearoa/australien03/sunshine\\_coast/strangler\\_fig.jpg](http://home.pages.at/aotearoa/australien03/sunshine_coast/strangler_fig.jpg)

slide of epiphytes - <http://jrscience.wcp.muohio.edu/photos/EpiphyteLoading00A.jpg>

Ceiba canopy emergent-

[http://www.elmundoforestal.com/esperanza/2AMARILLAS/zz\\_ceiba.jpg](http://www.elmundoforestal.com/esperanza/2AMARILLAS/zz_ceiba.jpg)

view of canopy

slide of canopy access techniques

leaf types for a whole forest

range of leaf types

## Diversity

table of diversity with latitude

slide of Species area curves

table of diversity with elevation

table of diversity with dry season

slide of fumigating trees for insect diversity -

[http://www.sil.si.edu/Exhibitions/wonderbound/images/com\\_pt\\_coll.jpg](http://www.sil.si.edu/Exhibitions/wonderbound/images/com_pt_coll.jpg)

## Tree regeneration

slide of gap outline

slide of gap regeneration temporal sequence

slides of gaps

characteristics of tropical tree regeneration types

## Nutrient cycling

slide of nutrient cycling

slide of nutrient composition of tropical forest  
Water cycling  
Humans, regeneration and fire  
slide of slash and burn effects