

Tundra

Coniferous Forest

Shrubland

Temperate Deciduous Forest

Rainforest

Desert

Grassland

# BIOMES STUDY

# Biomes and Aquatic Ecosystems

- A biome is a group land ecosystems with similar climates and organisms.
- It is mostly the climate (temperature and precipitation) in the area that determines its biome.
- Aquatic Ecosystems are water based habitats.

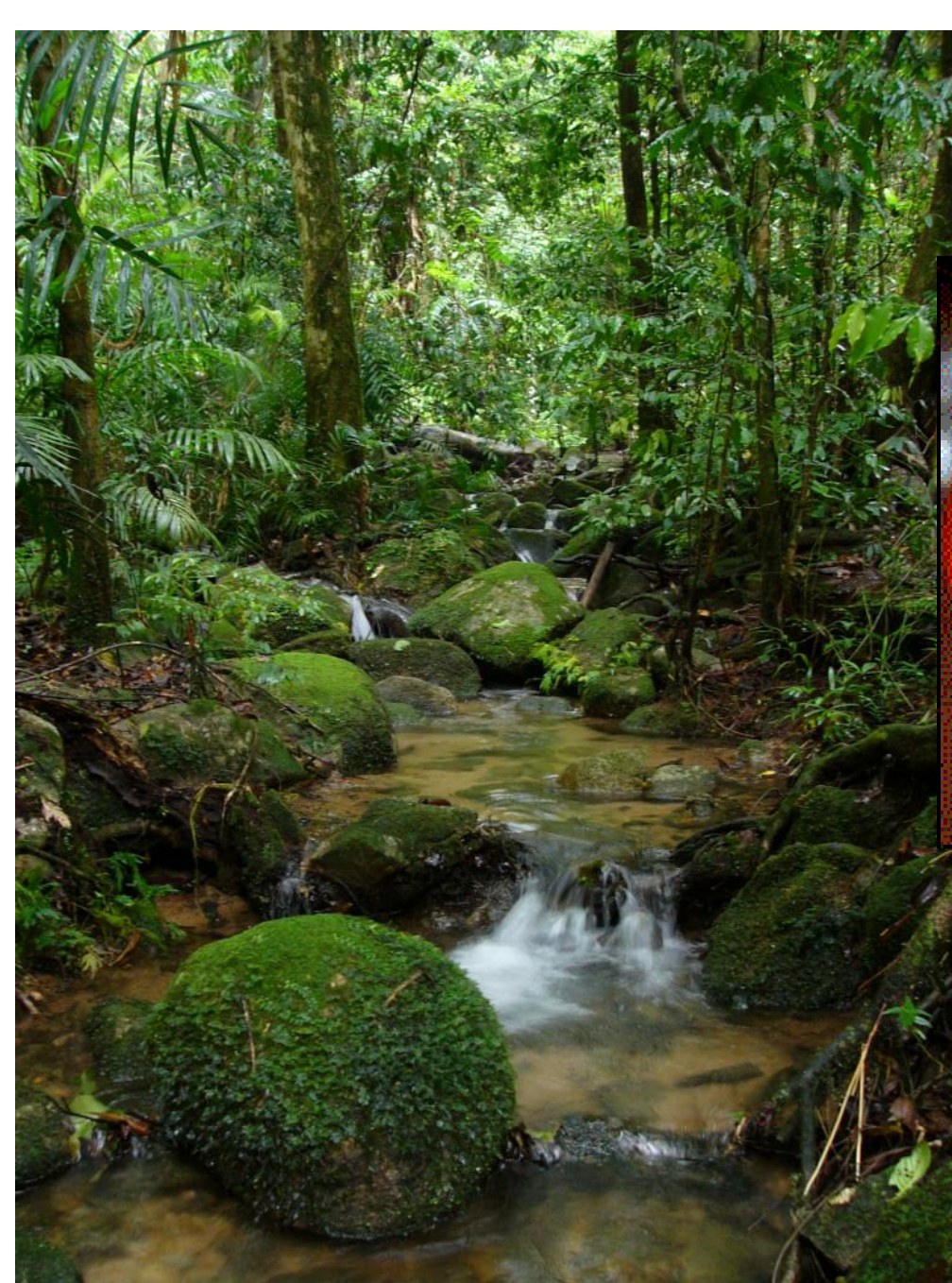
# Rain Forest Biomes

- Receives up to 300 centimeters of rain per year.
- Can be temperate or tropical.
- Most organisms on earth.
- Lots of food, water, and shelter.

# Tropical Rainforests

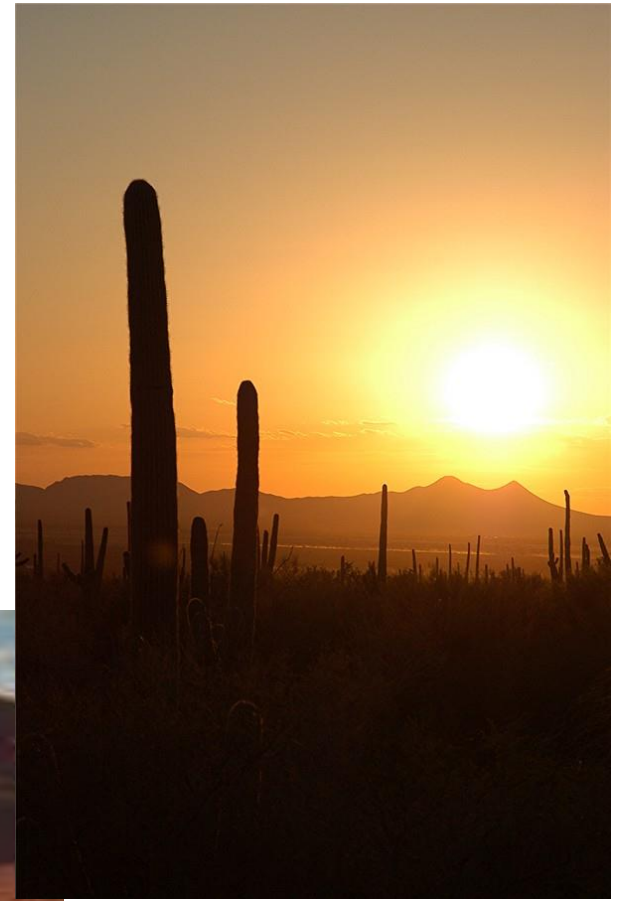
- Trees in the rainforest grow in distinct layers.
- Tall trees form a leafy roof called the *canopy*.
- Below the canopy a second layer of trees and vines form an *understory*.





# Desert Biome

- Receives less than 25 centimeters of rain per year.
- No trees and very few organisms due to scarcity of water.
- Cactus plants have a waxy surface to limit water loss.
- Most animals are nocturnal to avoid the heat.



# Grassland Biome

- Receive 25 to 75 centimeters of rain per year.
- Can be prairies or savannas.
- Few trees due to limited water but many organisms.
- Grass everywhere.





# Temperate Deciduous Biome

- Receive 75-150 cm of rain per year.
- Has four distinct seasons. Trees lose their leaves yearly.
- Many different organisms.
- You live here.



# Taiga/Boreal Forest Biome

- Receives 60 centimeters of precipitation per year (mainly snow).
- Covered in forests of *coniferous* (evergreen) trees.
- Covered in snow 10 months per year.
- Trees have waxy leaves to prevent water loss.





# Tundra Biome

- Receives less than 25 centimeters of precipitation per year (mainly snow).
- Extremely cold.
- Most of the ground is locked in a frozen state called *permafrost*. No trees can grow here.
- Few organisms due to extreme temperatures.





# Mountain Biome

- Progresses through different climates as you climb.
- More life forms closer to base of mountain.
- Fewer organisms and much colder as elevation increases.
- Mountains receive rain and snow regularly.

# Freshwater Ecosystem

- Include streams, rivers, ponds, and lakes.
- The faster water moves the more oxygen it contains.
- Slower water holds more organisms.







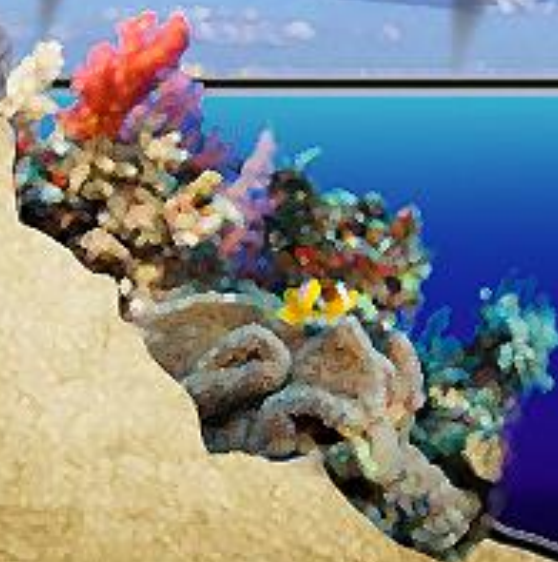
# Marine Ecosystems

- Estuary where rivers meet saltwater.
- Intertidal zones where the high tide and low tide marks are.
- Neritic zone that extends from the shore to the edge of the continental shelf.
- Open ocean lying past the continental shelf.

Intertidal Zone

Neritic Zone

Oceanic Zone



Benthic Zone





# Marine Ecosystems

- Shallow salt water supports the most organisms because sunlight reaches the bottom and the water is warmer.
- Coral reefs hold very diverse populations of marine life due to depth and shelter that coral structures provide.

