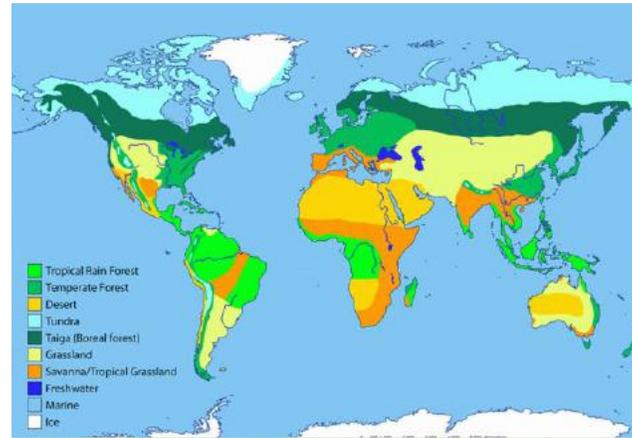


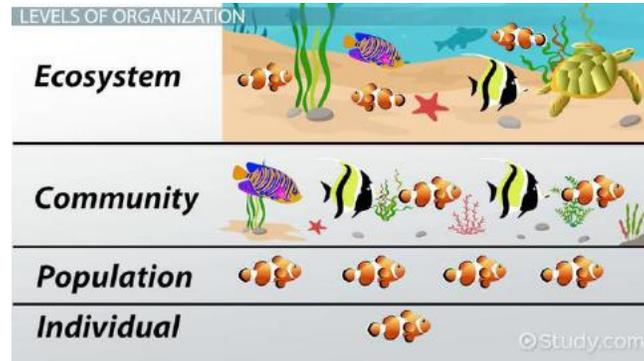
Lees Brook Community School Geography

Key Vocabulary

Climate	The average weather conditions for a place
Biome	A large scale ecosystem e.g. the Amazon or Sahara
Ecosystem	A community of plants and animals that interact with each other and their environment
Biodiversity	The number and variety of living species found in a specific area
Sustainability	Meeting our needs whilst causing no long term damage
Adaptations	A feature or characteristic an animal or plant has to help it survive
Niche	A specific role an animal or plant plays within an ecosystem
Tropical Rainforest	A large scale ecosystem found close to the equator. Year round high temperatures and rainfall make it good for growth of plants.
Coral reefs	Shallow marine ecosystems made up of species of coral. These coral provide habitats for lots of species and are high in biodiversity.
Coral bleaching	When corals become nutritionally void due to expulsion of polyps. This occurs when a coral is stressed, often due to temperatures.



Global biome map



Benefits of coral reef ecosystems

- Reefs shelter land from ocean storms and floods
- Corals remove CO2 from the atmosphere, reducing the impacts of climate change
- Reefs provide home to 25% of marine species (despite only 1% of the area)
- Reefs provide an estimated \$375 billion in goods and services.

Ecosystems

Animal Adaptations.

Fat is stored in the hump of the camel. This provides energy in times of food shortage in the desert. They don't store water in their humps!

Camels have two rows of eyelashes which are long and slit-like nostrils which help keep out the sand being blown around in the desert.

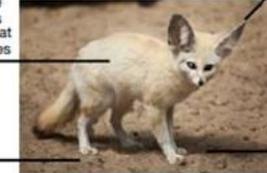


Thick fur on the top of the body for shade, and thin fur elsewhere to allow easy heat loss in high desert temperatures.

Large padded feet which allows them to spread their weight on the sand.

The desert fox is nocturnal. They sleep underground during the day when temperatures are high and come out at night when temperatures are cooler and more comfortable

The desert fox has large ears which allows it to radiate body heat and help keep them cool in the hot desert environment.



The fox's feet are effective shovels for frequent digging — fennec foxes live in underground dens.

The fox's feet are hairy, which helps them perform like snowshoes and protects them from extremely hot sand.

Savanna Biome

These are found to the north and south of tropical rainforests. Savanna regions have distinct wet and dry seasons. This biome has lots of wildlife within it however, animals may migrate great distances for food and water.

Coral Reefs

Threats to coral reef ecosystems

- Rising temperatures are causing corals to 'bleach' – this is when they become nutritionally 'dead'
- Oceans are becoming more acidic – this is killing corals which are sensitive
- Without any further damages, it will take the Great Barrier reef about 500 years to recover from recent bleaching events.

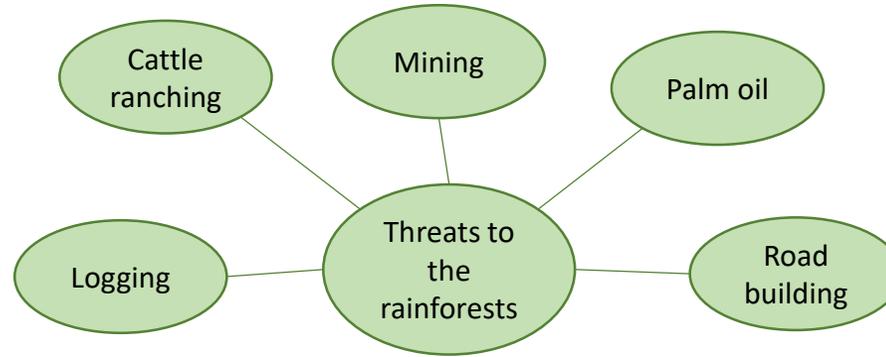
Great Barrier Reef Map



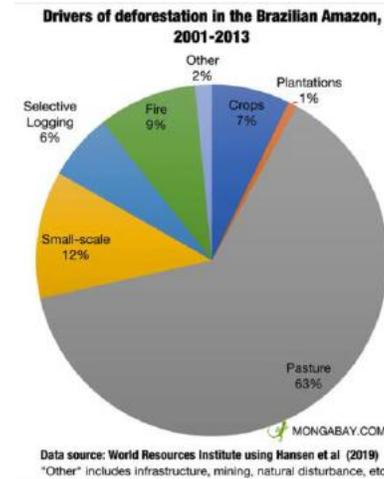
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Canopy	The layer of the rainforest with the highest biodiversity. Leaves of the taller trees are all here.
Buttress roots	Large, wide roots on trees which stop them from falling over due to their size
Epiphytes	Plants which grow on other plants, rather than rooted into the ground (e.g orchids)
Decomposer	An organism which breaks down dead material – such as a fungus
Logging	The act of chopping down trees for wood
Deforestation	Clearing an area of forest
Cattle ranching	Farming cattle for produce (often beef)
Selective logging	Only chopping down certain trees in an area, rather than all. This allows regrowth in the forests
Nature reserves and national parks	Areas of protected land (and ecosystems) where development (building) is prohibited
Ecotourism	Responsible tourism which is kind to the environment and does not destroy habitats.

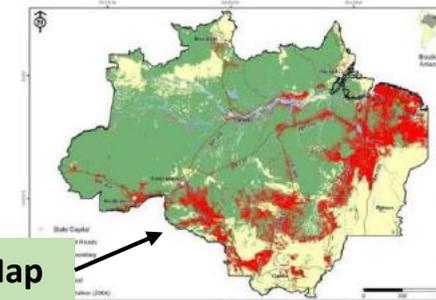
Ecosystems



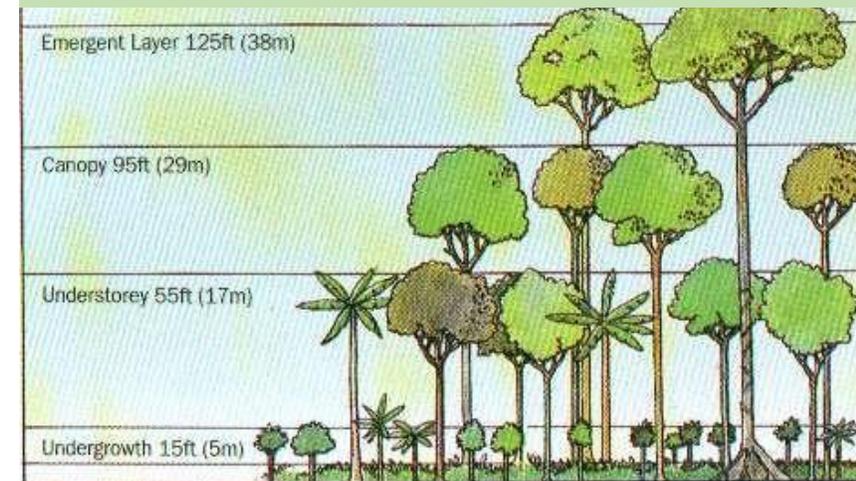
Managing the rainforest - sustainably



Amazon Deforestation Map



Layers of the tropical rainforest



Emergent layer: Where the tallest trees grow out of the top of the canopy. These trees experience the most light and windiest conditions

Canopy: The layer of the rainforest with the highest biodiversity. Leaves of the taller trees are all here, alongside birds, mammals and fruits of trees

Understorey: Much darker than the canopy. Smaller shrubs and trees grow here, including lianas (Tarzan's vines)

Forest Floor: Only 2% of sunlight reaches here. Damp and humid. Lots of dead litter (leaves) from trees are decomposing. Mainly insects and mammals venture here.

Causes of deforestation

- Logging
- Cattle ranching
- Crop farming (palm oil)
- Mining
- Dam building
- Building of concrete roads