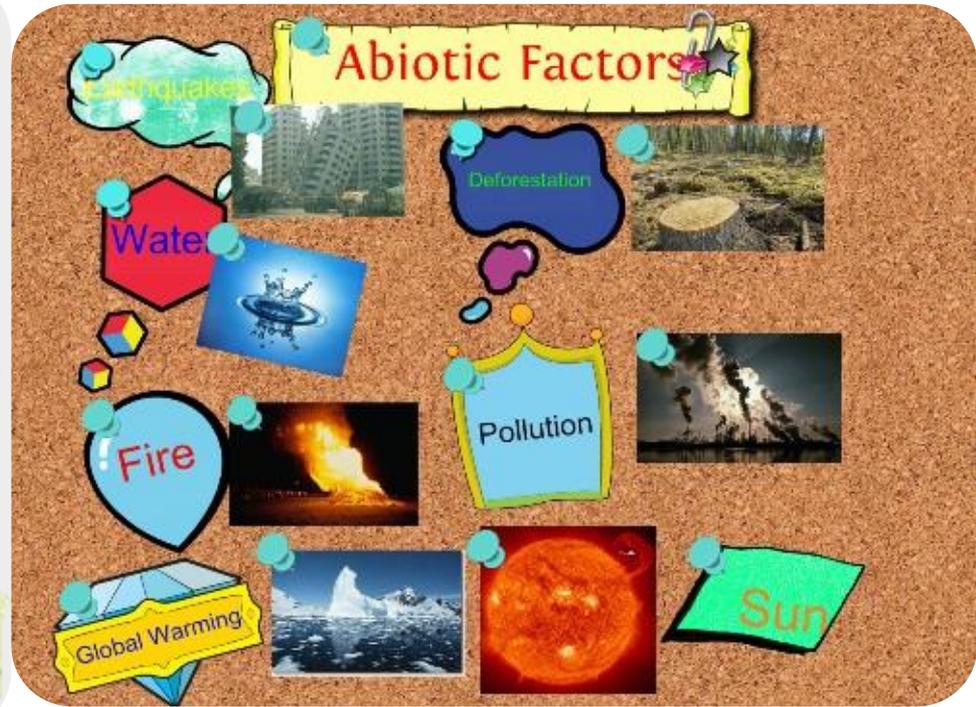
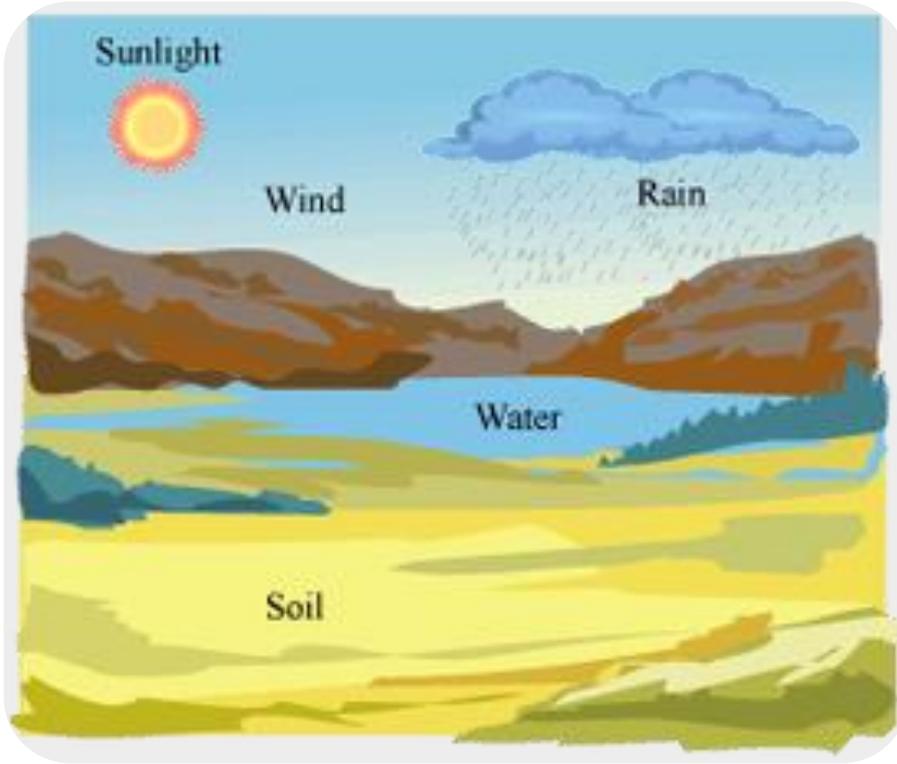


Ecosystems

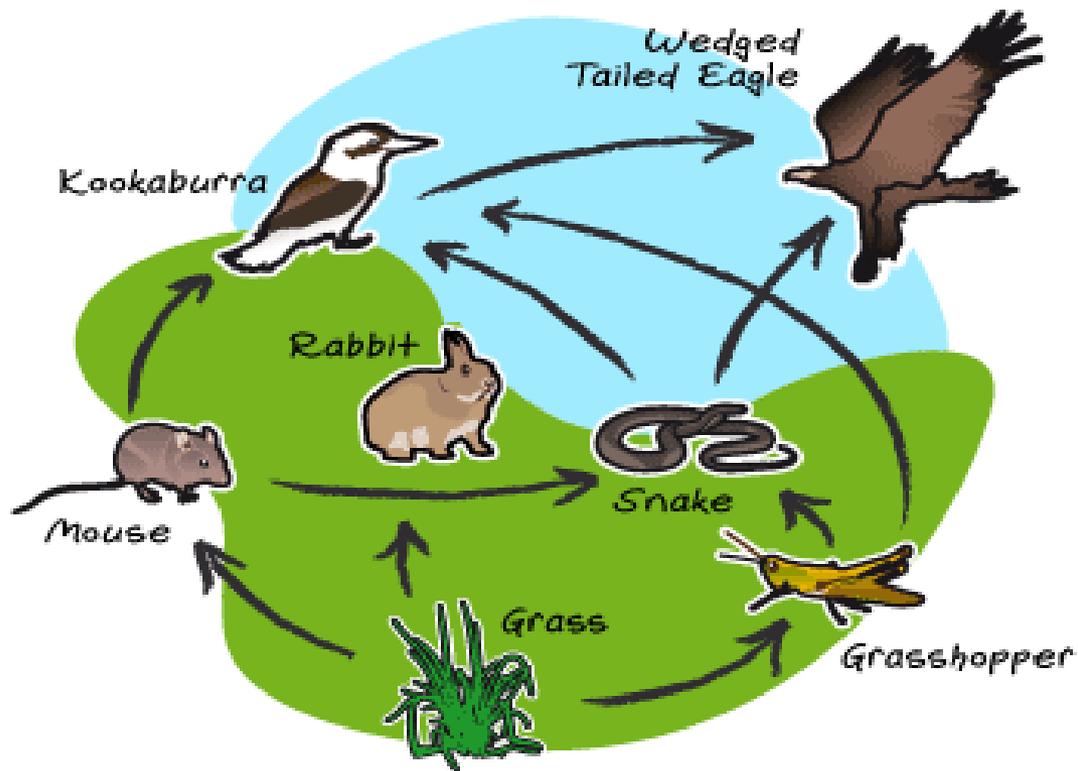
- **An ecosystem is made up of many parts.**
 - ◆ **Abiotic factors include air, water, soil, nutrients and light.**
 - ◆ **Biotic factors include plants, animals and micro-organisms.**
 - ◆ **Ecosystems can take up many hectares of land, or can be the size of an old log.**
 - ◆ **A habitat is where an organism lives.**

The habitat of the red fox often includes the edges of forests or marshlands





Abiotic



Biotic

Abiotic Interactions in Ecosystems

- **Abiotic components are what allow the biotic components to survive in an ecosystem.**
 - ◆ **Abiotic factors include oxygen, water, nutrients, light and soil.**
 - **Oxygen is produced by the green plants and certain micro-organisms, and is used by animals and most other micro-organisms.**
 - **Water is necessary for all life.**
 - **Nutrients often enter the food chain with plants, and are very important for growth.**
 - **Light is required for photosynthesis, which is the process in plants that converts and stores the Sun's energy into starches and carbohydrates.**
 - **Soil not only contains water and nutrients, but also is home to many plants and animals.**

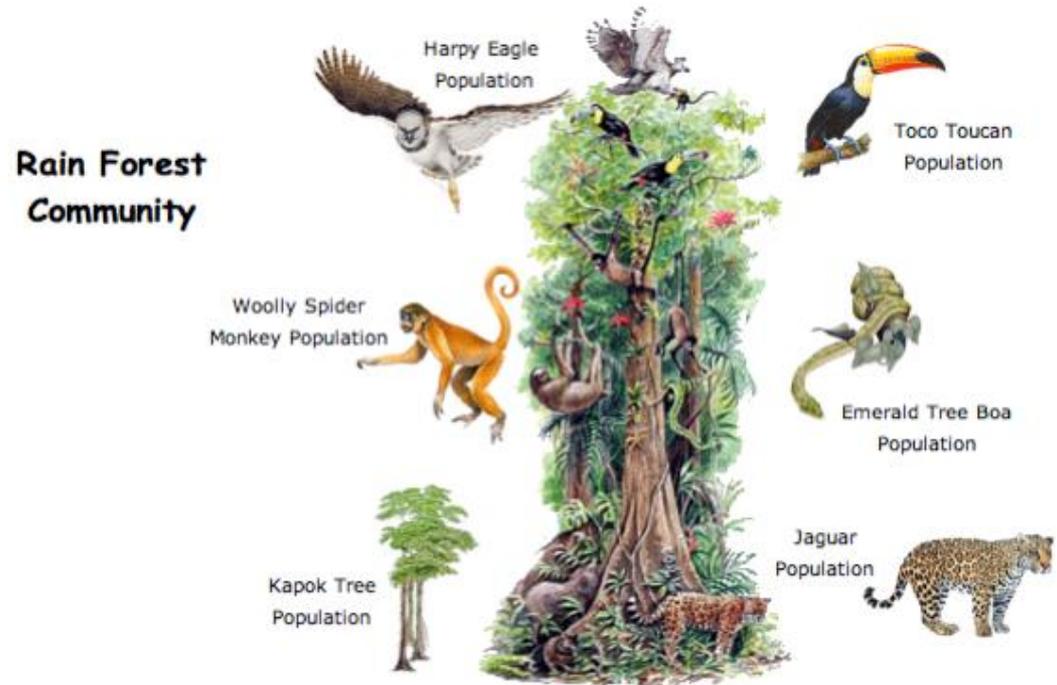


Biotic Interactions in Ecosystems

- A community of organisms = all the organisms that interact within an ecosystem.
 - ◆ A population of organisms refers to all of the members of a certain species within an ecosystem.
 - ◆ A species refers to all of the organisms within an ecosystem that have the same structure, and who can reproduce with each other.



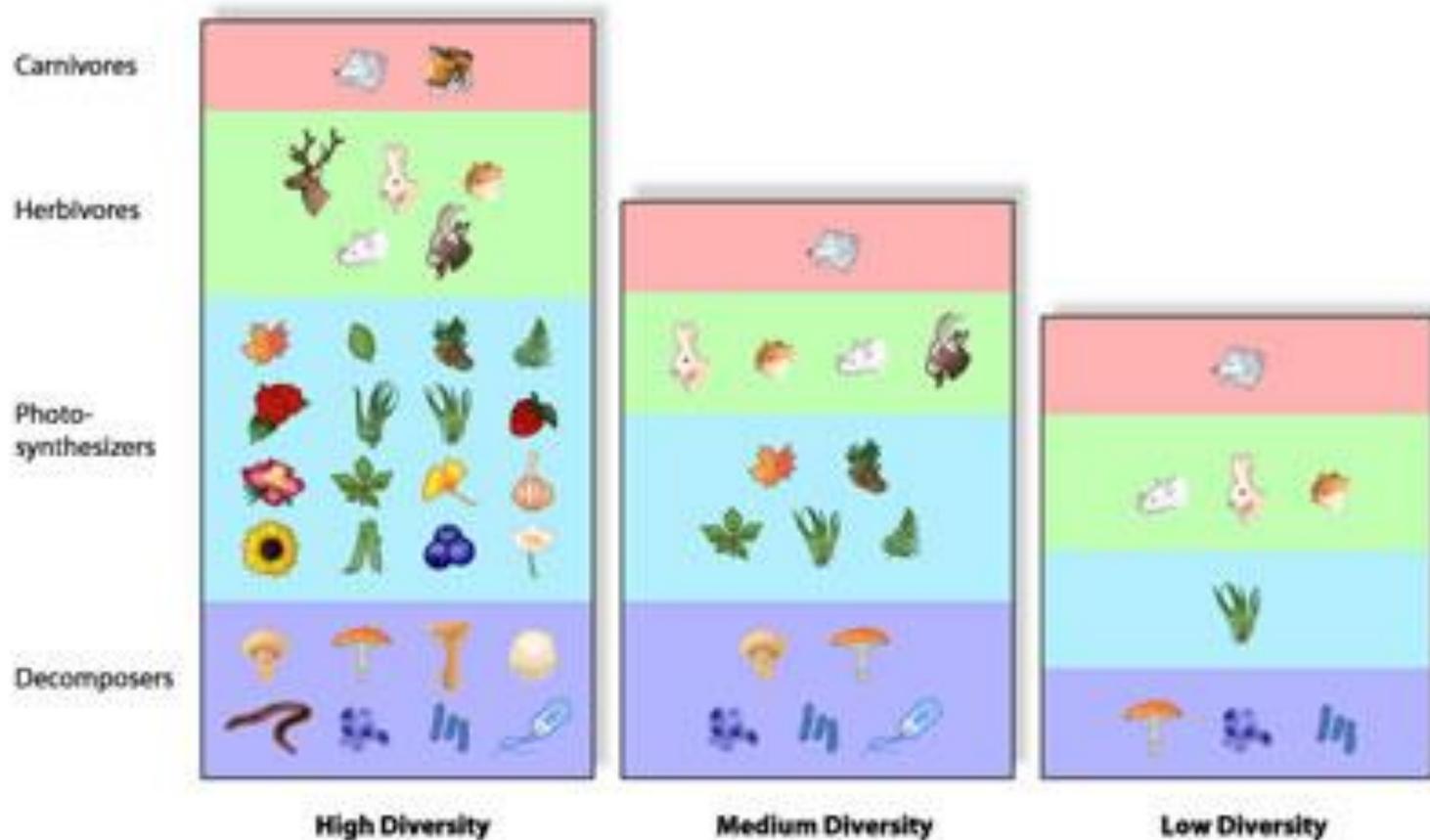
Species population



Rain Forest Community

Biodiversity in Ecosystems

- Biodiversity refers to the variety and number of different individuals and species in an ecosystem.
 - ◆ Healthy ecosystems generally have high biodiversity.



Biodiversity in Ecosystems

- **Humans often have a negative impact on biodiversity.**
 - ◆ Many efforts are now made to lessen this impact in order to maintain biodiversity.
 - Ecological management programs try to balance human progress with maintaining biodiversity.

