

ECOSYSTEMS

Ecosystems

All of the living and nonliving things in an environment.

Biotic = living
Abiotic = nonliving

Biotic

Bio is a Latin prefix meaning "life"

Examples:

- plants
- animals

Abiotic

Means "lack of life"

Examples:

- temperature
- water
- soil (ground)
- air
- sunlight

1/25
Biotic

grass

deer

catfish

cactus

worms

frog

shark

Abiotic

snow

water

sunlight

climate

rocks

wind

rain

Ecosystem Types :

Terrestrial

land-based ecosystems:

- Forests
- Wetlands
- Grasslands

Aquatic

Water-based ecosystems:

Freshwater

- lakes/ponds

Saltwater

- oceans
- estuaries
- saltwater marshes

Terrestrial Ecosystems

Description	Temperature	Rainfall	Sunlight	Salinity (Amount of salt in water)	Soil Composition (What the soil is made of)
<u>FORESTS</u> - Many trees, shrubs, ferns, grasses, and different types of animals.	Average temperature in a temperate forest is 0-70°F	Forests receive more rainfall than grasslands.	Canopy (top layer of the forest) receives many hours of sunlight.	NO WATER	Based on the type of forest. Decaying leaf matter.
<u>WETLANDS</u> - An area of land that is underwater for at least part of the year.	Depends on location	Depends on location	Marshes do not have many trees and receive full sunlight. Swamps have many trees and receive less sunlight.	Depends on location.	Wetlands help prevent flooding and erosion of the soil.
<u>GRASSLANDS</u> - land covered in grasses with few trees. Includes prairies, steppes, and savannahs.	A temperate grassland ranges from over 100°F to below 0°F	Average rainfall is between 50-88 cm yearly.	Full sun all day.	NO WATER	Fertile soil (good for growing plants).

Aquatic Ecosystems

Description	Temperature	Rainfall— Water	Sunlight	Salinity (Amount of salt in water)
<u>Oceans</u> - large bodies of saltwater divided by continents.	Deep ocean water is colder than water at the surface because it is further from the sun.	How deep an ocean is depends on its location.	Full sun.	Very salty.
<u>Estuaries</u> - where the freshwater rivers meet the oceans.	Depends on location.	Saltier than a river, but not as salty as the ocean, called BRACKISH water.	All day sun.	Brackish
<u>Lakes and Ponds</u> - Bodies of freshwater that are surrounded by land.	Ponds stay the same throughout. <u>Lakes</u> get colder as you get deeper.	Ponds are shallower than lakes.	All day sun.	Freshwater (no salt)

Populations and Communities

Biotic (living) organisms

Grouped in 2 ways:

- populations
- communities.

Populations

All members of one kind of organism that live in a particular area.

Example: All the white tailed deer in a forest.

Communities

All the different populations of organisms in an area that are coexisting at the same time.



communities Example: all the deer, squirrels, acorn trees, and grass in a forest.

