

Ecosystem Interactions

- **A habitat** : the physical environment where an organism lives

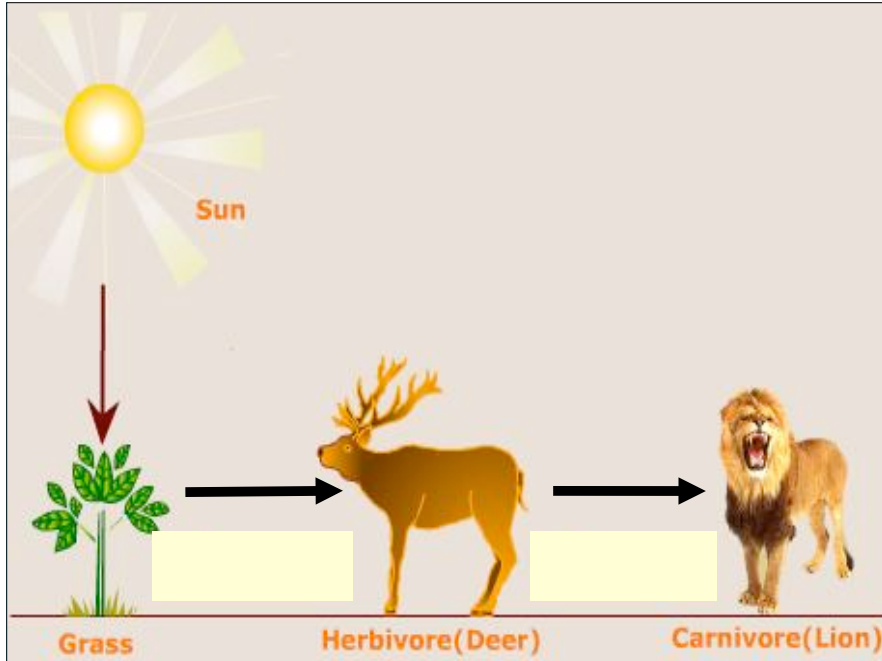
Ecosystem Interactions

- **An ecological niche**: the role an organism performs in an ecosystem; closely associated with feeding

Ecological Interactions

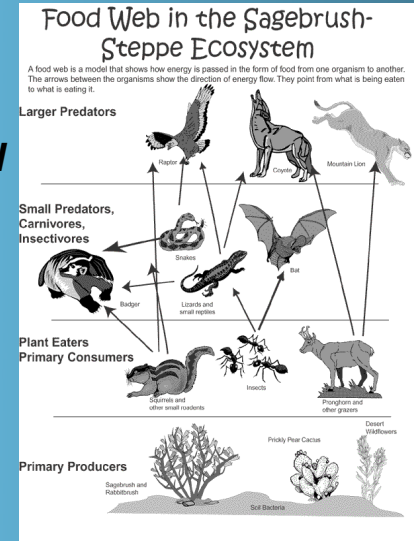
- **Food chain**: step by step linkage of organisms within an ecosystem, in which each organism feeds on the one before it and is fed on by the one after it.
 - Primary source of energy is the sun
 - All food chains start with a producer
 - Arrows show the pathway of energy flow

Sun → Grass → Deer → Lion



Ecological Interactions

- **Food web:** is a complex of interrelated **food chains** in an ecological community.



Ecological Niches

- **Producers (Autotrophs):**
 An organism that makes its own food by the process of photosynthesis.

Examples:

- Plants
- Algae
- Cyanobacteria



Ecological Niches

- **Consumers (Heterotrophs):**
 An organism that ingests other organisms or organic matter in a food chain.

Examples:

Any Animal



Ecological Niches

- **Herbivores:**

An animal that feeds chiefly on plants.

Examples:

- Rabbit
- Horse
- Cow
- Lamb



Ecological Niches

- **Carnivores:**

An animal that feeds on another animal.

Examples:

- Lion
- Wolf
- Fox
- Tiger



Ecological Niches

- **Omnivores:**

An organism that feeds on animals and plants.

Examples:

- Bear
- Human
- Raccoon



Ecological Niches

- **Scavenger:**

An organism that feeds on dead material.

Examples:

- Vultures
- Crows
- Hyena



Ecological Niches

- **Decomposers or Detritivores:**

An organism, often a bacterium or fungus, that feeds on and breaks down dead plant or animal matter, thus making organic nutrients available to the ecosystem.

****Our nutrient recyclers!**

Examples:

- Earthworms
- Beetles
- Flies

