

Ecology
Chapter 2 Section 1
Groups of living things interact within ecosystems

Ecology Ch. 2 Learning Goal 1: Describe how groups of living things interact with each other.

LSO

Information

Organisms occupy specific living areas (p.45)

Scientists group living things according to their shared characteristics.

Species: a group of organisms so similar that they can produce _____ that can also _____ offspring.

Ex: _____

Population: a group of organisms of the same _____ that live in a particular _____

Ex: all the rabbits in Kansas City

1. How does a boundary define a population?

Living things survive in places with different characteristics:

Habitat: the _____ location where plants and animals live. A habitat has characteristics like precipitation, _____, and soil quality (abiotic factors)

Ex: rabbits live in _____ or meadows

Niche: the special _____ an organism plays within its _____ (like its specific needs)

Ex: rabbits eat grass, flowering plants, weeds, and the _____ of small trees. They graze (eat) for long periods of time and live in _____ that they dig.

2. What things about an animal show us its niche?

Different types of organisms live together

Community: a group of _____ that live in a particular _____ and interact with one

Ex: rabbits, squirrels, _____, skunks, raccoons, and _____ all live in the woods

The environment can be organized into five levels (p. 48)

1) BIOME

Large area characterized by a certain _____ and specific types of plants

2) ECOSYSTEM

Smaller than a biome but contains _____ and _____ factors living together (includes organisms and their _____ environment)

3) COMMUNITY

Living components of an ecosystem. Different _____, animals, and other organisms interact.

4) POPULATION

Group of organisms of the same _____ living in the same area.

5) ORGANISM (INDIVIDUAL)

A single _____ living thing (one organism of one species)

3. Describe the gazelle's place in each level of the environment.

Patterns exist in populations (p.50)

Populations of animals may be crowded together, be spread far apart, or live in small groups.

Patterns in living space

The distribution of animals in a habitat is influenced by how they meet their needs. Animals must be able to reach food and have a place to raise their young.

- Ex: creosote bushes- spaced evenly in the desert because each bush releases a toxin to keep other plants from growing too close to it. Each bush competes with other organisms.
- Ex: Herring fish swim in schools that are spaced a certain way, and wildebeests roam the African grasslands in closely packed herds. These are examples of patterns of living space.

Patterns in time

Animal populations increase at different times of the year

Ex: yellow jacket wasp populations are high in the summer and fall but low in the winter and spring

Ex: birds that nest in North America in summer fly south to Central and South America in winter.

4. Is the herd a pattern in space or in time? Explain.

5. How does living in large herds meet animals' needs?
