

Ecosystems Support Life

Section 1.1

1.1 Ecosystems Support Life

1. Living things depend on the environment.

Ecosystem

- An **ecosystem** comprises organisms and their physical environment.



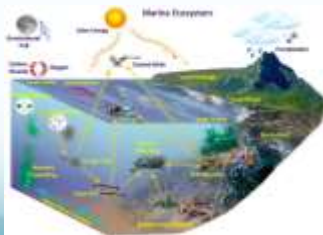
Ecology

- **Ecology** is the scientific study of how organisms interact with their environment and with other organisms.



Natural Ecosystems

- Natural ecosystems include water, air, and sunlight, as well as microorganisms, plants, and animals.



Biotic Factors

- **Biotic factors** are the living parts of an ecosystem.



Abiotic Factors

- **Abiotic factors** are the nonliving parts.



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Organism Interaction

- Every organism affects, and is affected by, other organisms in its ecosystem.
- Moles are a good example of this.



Moles Interacting with Biotic Factors

- They eat insects, worms, and grubs.
- They can severely damage plants, but moles help keep insect populations in check.



Moles Interacting with Abiotic Factors

- Mole tunnels aerate soil, which is necessary for the growth of soil organisms and plant roots.



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3. Many abiotic factors affect ecosystems.

Abiotic Factors

Abiotic factors include any nonliving features of the environment, from soil fertility to climate characteristics –

- precipitation
- temperature
- air currents
- and humidity



Influential Abiotic Factors

• Here is a short list of the most influential factors.

- available water
- temperature
- available light
- soil content



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Skill Check

1. An _____ comprises organisms and their physical environment.
 - a) biotic factors
 - b) ecosystem
 - c) abiotic factors

Skill Check

2. _____ are the living parts of an ecosystem.
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 - b) ecosystem
 - c) abiotic factors

Skill Check

3. _____ are the non-living parts.
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