


Ecosystem dynamics and disturbances

ST
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Complete this Concept Review so you can keep a record of what you have learned.

Definitions

- The material and energy flow is the exchange of matter and energy between the living organisms in an ecosystem and between those organisms and their environment.

- Chemical recycling is a natural phenomenon in which decomposers make inorganic matter available in an ecosystem by breaking down organic matter.

- The biomass is the total mass of organic matter in an ecosystem at any given time.

- The primary productivity of an ecosystem is the amount of new biomass generated by its producers.

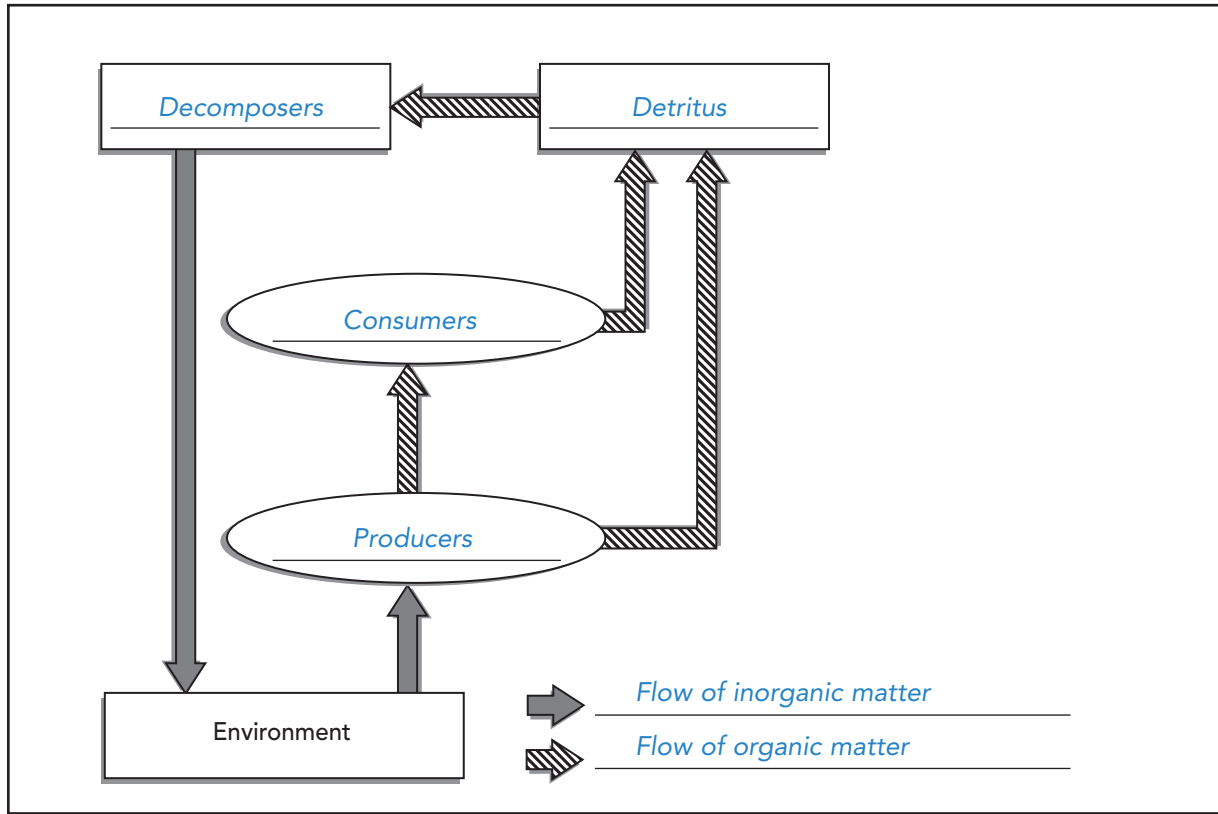
- A disturbance is an event that damages an ecosystem. It can lead to the elimination of organisms and alter the availability of resources.

- Ecological succession is the series of changes that occur in an ecosystem after a disturbance and that continue until the balance of the ecosystem is restored.

Factors influencing primary productivity in an ecosystem

- The amount of light
- The amount of water available
- Access to essential nutrients for producers (carbon, nitrogen, phosphorous, potassium)
- The temperature

Chemical recycling in an ecosystem



Types of disturbances

Type	Definition	Examples
<i>Natural disturbances</i>	<i>They are triggered by environmental phenomena rather than by humans, but they damage ecosystems nonetheless.</i>	<i>Hurricane, ice storm, forest fire of natural origin</i>
<i>Human disturbances</i>	<i>Human activities that have a damaging effect on ecosystems.</i>	<i>Logging operations, oil spill, mining</i>