

Transfer Of Energy In An Ecosystem LR

Transfer of energy in an ecosystem. Objective, to learn that plants take energy from the sun and how this energy gets transferred to other organisms. All living things need energy to perform various activities.

This energy comes from the food we eat, but plants don't have mouths to eat food as we do. So how do they get their energy? Plants make their own food and hence are called producers. They trap the sun's energy in their leaves and use it to manufacture their food.

This food is stored in the plants in the form of starch and is used by them later when there is no sunlight. Plants also pass on some of this stored food to other animals. Animals cannot make their own food and hence are dependent on plants for energy.

When animals eat the plants, they get some of the sun's energy from the plants. Such animals are called consumers. Some consumers, for example human beings, eat plants as well as animals to get energy.

In this way, the sun's energy gets transferred from the plants to the different organisms. To summarize, plants make their own food and hence are called producers. They store their food in the form of starch and use it later when there is no sunlight.

Animals cannot make their own food and hence are dependent on plants for energy. Some consumers, for example human beings, eat plants as well as animals to get energy.

Summary:

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All living organisms require energy to perform their activities. This energy originates from the Sun and is passed through different organisms in an ecosystem.

- Plants (producers) trap solar energy and produce food through photosynthesis. The energy is stored in the form of starch for later use.
- Animals (consumers) cannot produce their own food, so they depend on plants for energy.
- Humans and some animals consume both plants and animals, transferring energy further in the food chain.

This continuous transfer of energy helps sustain life in an ecosystem. 

Quiz: Transfer of Energy in an Ecosystem

1. What is the primary source of energy for all living things?

- ☒ a) The Sun
☐ b) The Moon

- ☒ c) The Soil
- ☒ d) The Air

2. Why are plants called producers?

- ☒ a) They make their own food using sunlight
- ☒ b) They consume other organisms for energy
- ☒ c) They depend on animals for survival
- ☒ d) They store water for animals

3. What are animals that depend directly on plants for food called?

- ☒ a) Consumers
- ☒ b) Producers
- ☒ c) Decomposers
- ☒ d) Pollinators

4. How do humans obtain energy?

- ☒ a) By eating both plants and animals
- ☒ b) By absorbing sunlight
- ☒ c) By producing their own food
- ☒ d) By drinking water