

Environments & Biomes

Plants and animals cannot live just anywhere. They must have an environment, or surroundings, that suits them. Climate, land features, and water are all part of a living thing's environment. Plants and animals adapt to specific environments. For example, kangaroo rats do not need to drink much water and are adapted to a desert environment.

An ecosystem is the connection between a particular environment and the plants and animals that live there. They all depend on each other for survival. Ecosystems can be as small as a garden pond or as large as a forest. Biomes are much larger than ecosystems. They may contain several ecosystems.

Each part of an ecosystem fills a certain role in a cycle. For example, the sun provides energy to plants, which use it to make food. These plants then provide energy and food to other plants and animals. When these life forms die, their bodies break down and give nutrients to the soil so more plants can grow.

A small change in one part of an ecosystem can affect the whole system. Many natural events and human actions affect ecosystems and the habitats in

them. A habitat is the place where a plant or animal lives. Natural events include forest fires, disease, and climate changes.

Human actions such as clearing land and polluting can destroy habitats. For example, people are clearing Earth's rain forests for farmland, lumber, and other reasons. As a result, these diverse habitats are being lost. If a change to the environment is extreme, a species might become extinct, or die out completely.

Many countries are passing laws to protect the environment. Although these laws do not please everyone, they can have good results. The U.S. Endangered Species Act of 1973 has saved 47 species from becoming extinct.

An environment's soil affects which plants can grow there. Fertile soils have lots of humus and minerals. Humus is decayed plant or animal matter.

Soils can lose fertility from erosion when wind or water sweeps topsoil away. Soil can also lose fertility from planting the same crops repeatedly. When soil becomes worn out and can no longer support plants, desertification can occur. The spread of desert conditions causes problems in many parts of the world.