

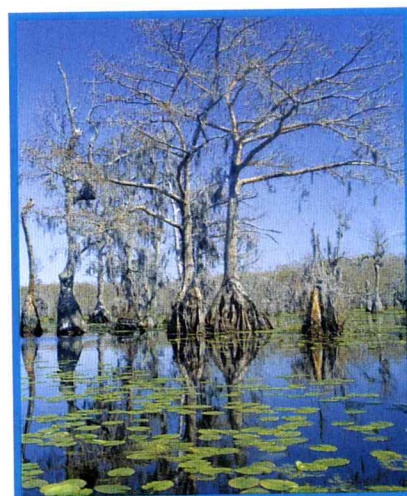
A terrestrial ecosystem

Comparing Aquatic and Terrestrial Ecosystems

Aquatic and terrestrial ecosystems are very different. But they are the same in some ways. Let's compare.

The **nonliving** factors of the two environments are different. **Aquatic** ecosystems are in water. Terrestrial ecosystems are on land. The temperature in an aquatic ecosystem changes slowly. The temperature in a terrestrial ecosystem can change rapidly over a short period of time. The amount of water in an aquatic ecosystem is predictable. Water in a terrestrial ecosystem can vary widely.

The organisms are different in the two ecosystems. Most aquatic organisms can live only in water. If they were moved to a terrestrial ecosystem, they would die. The same is true for terrestrial organisms moved into aquatic ecosystems.



An aquatic ecosystem



A heron is a consumer of crayfish in an aquatic ecosystem.



A fox is a consumer of mice in a terrestrial ecosystem.

Both ecosystems, however, are organized in similar ways. The organisms in aquatic and terrestrial ecosystems all need matter and energy to stay alive.

- Both ecosystems obtain energy from the Sun and matter from the environment.
- Both have food chains and food webs.
- Both have consumers that depend on producers to make food.
- Both have decomposers that break down dead organisms and recycle the raw materials (**nutrients**).
- Herbivores, carnivores, omnivores, and scavengers live in both ecosystems.

In both ecosystems, organisms compete for the resources they need to survive. Plants compete for light. Animals compete for food. Organisms need space and shelter from predators and changes in the nonliving environment. The organism that outcompetes the others is the organism that will survive.