Animals, habitats and food chains

Significant Scientist



Carl Linnaeus (1707-1778) was a botanist, zoologist and physician. He's most famous for simplifying the naming system scientists use to describe the millions of species on Earth.



Rachel Carson (1907-1964) was a marine biologist. She was most famous for her book Silent Spring (1962) which warned of the damage humans were doing to the environment.









Key Knowledge

All living things, which can also be called organisms, have to do certain things to stay alive. These are the life processes.

Living things can be grouped according to different criteria—where they live, what type of organism they are, what features they have. For example, a camel can belong in a group of vertebrates, animals that have an internal backbone.

How can environments change?

Habitats can change throughout the year and this can have an effect on the plants and animals living there. Humans can have positive effects on the environment, e.g. nature reserves, but can also have negative effects on the environment e.g. damage it.

People-made Threats to the Environment: Air-pollution from cars, e.g. carbon monoxide, and the burning of fossil fuels.

Water pollution through industrial waste and farm fertilisers that can pollute rivers and streams.

Rubbish—Plastic and household waste ends up on the streets, in the sea or in rubbish dumps, destroying habitats and wildlife.

A food chain is a simple way to show the direction in which energy moves from the producer to the various consumers to the top or tertiary consumer.

A food web shows the direction in which energy travels when animals and producers (plants) are eaten by more than one thing. A food web shows multiple food chains where there are multiple feeding relationships.

When part of the food chain is removed, it has an impact on the other parts of the food chain. The number of some species will increase, while the population of others will decrease. This can have a direct impact on the survival of the species.

The population of tertiary consumers depends on healthy populations of producers and consumers.

Key Vocabulary	
organism	A living thing.
producer	Organisms that make their own food using energy from the Sun.
consumer	An organism that feeds on producers . They are always herbivores.
predator	An animal that kills and eats other animals.
prey	An animal hunted or captured by another for food.
human impact	Changes to environments and to ecosystems, biodiversity, and natural resources caused directly or indirectly by humans.
environmental change	A disturbance of the area around us most often caused by human influences and natural ecological processes.

Working Scientifically Skills

Oral and written explanations

Gather, record, classify and present data in a variety of ways to help in answering questions

Enquiry Skills

Identifying and classifying

Research

Pattern seeking

