



What is an ecosystem?

KS2

KS3

Ages 7-14 ⌚ 2 min read

An **ecosystem** is essentially nature's neighbourhood — a place where all the living things (plants, animals, fungi, and tiny microbes) share space with non-living things like water, soil, air, and sunlight. Just like your neighbourhood has houses, shops, parks, and roads that all work together, an ecosystem has different parts that depend on each other to keep everything running smoothly.

The Web of Life

In any ecosystem, every creature has a job to do. Plants are like nature's chefs — they use sunlight to cook up their own food through photosynthesis, and they're the foundation that feeds everything else. Herbivores (plant-eaters) munch on the plants, carnivores (meat-eaters) hunt other animals, and decomposers like bacteria and fungi are nature's recycling crew, breaking down dead things and returning nutrients to the soil.

Think of an ecosystem like a massive game of Jenga. Every block (every species) supports others above and below it. You might think removing one small block won't matter, but sometimes that one piece can cause the whole tower to wobble or even collapse.

Size Doesn't Matter

Ecosystems come in all sizes. A vast rainforest is an ecosystem, but so is a small pond in your garden, or even a rotting log in the woods. Each one has its own community of creatures that have adapted to live there. A desert ecosystem looks completely different from a coral reef ecosystem, but they both work on the same basic principle: everything is connected.

Keeping the Balance

What makes ecosystems fascinating is how they maintain balance naturally. If there are too many rabbits, more foxes might survive and reproduce, which eventually brings the rabbit population back down. If a drought kills many plants, some plant-eating animals might struggle, but the ecosystem gradually adjusts. However, when

humans make sudden, big changes — like cutting down entire forests or polluting rivers — ecosystems can struggle to cope. Understanding how ecosystems work helps us make better decisions about protecting these incredible natural communities that we're all part of.