

Edexcel A Geography GCSE

Topic 3: Ecosystems, Biodiversity & Management Glossary of Definitions

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Glossary of Definitions - Ecosystems, Biodiversity & Management

Abiotic Components - Non-living environmental factors that have influence over the ecosystem (e.g. climate, light exposure, soil type).

Acid Rain - Rain with a pH of around 4, formed when chemicals from industrial processes react with water in clouds to form acids.

Adaptation - An evolved trait of an animal or plant that helps them to cope with environmental stresses.

Biodiversity - The variety of species of plants and animals within a region.

Biofuels - Fuels produced from organic material such as crops, vegetation and biomass.

Biomass - Total mass of organisms in a set area.

Biome - Also known as a global-scale ecosystem; a large, distinct region of the Earth with similar climate, soil, plants and animals.

Biotic Components - Living organisms that interact with the environment and other organisms within an ecosystem.

Buttress Roots - Large, thick tree roots that grow above the ground in tropical rainforests.

Camouflage - An animal adaptation where animals purposefully look like their surroundings to hide from predators.

Canopy - The layer of a tropical rainforest where the tops of trees touch, forming a dense area of vegetation.

Cattle ranching - The rearing of cows on large areas of land, usually to produce meat to sell for a profit.

CITES - (The Convention on International Trade in Endangered Species of Wild Fauna & Flora) an international agreement that works to protect threatened wildlife from exploitation.

Clear felling - A form of logging where all trees in an area are cut down.

Climate change - A distinct change in global or regional patterns of climate, such as changes in temperature or precipitation patterns.

Commercial farming - Agriculture that is intended to create surplus produce to sell for a profit.



Conifers - Cone-bearing trees that are usually evergreen and have needle-shaped leaves, native to colder environments.

Conservation - Taking action to ensure a resource or environment is not depleted and over-exploited.

Consumers - Organisms that receive energy from consuming (eating) other living organisms.

Deciduous Woodlands - Vegetation that loses its leaves every year, due to seasonal changes.

Decomposers - Organisms that break down organic material and release the nutrients back into the ecosystem.

Deforestation - The permanent (and usually large-scale) removal of trees.

Drought - A prolonged dry period in the natural climate cycle that can occur anywhere in the world (WHO Definition).

Ecosystem - A natural system in which a community of plants and animals interact with each other and their physical environment.

Ecotourism - Tourism that aims to have a reduced environmental impact while supporting conservation efforts and making it sustainable.

Epiphytes - Plants that live on the surface of other plants, receiving nutrients from these plants.

Food Web - A representation of the interactions between multiple producers and consumers within a specific ecosystem.

Forest Fire - An uncontrolled fire that burns woodland and vegetation (also called a wildfire).

Fossil Fuels - Fuels made up of the remains of organic material, such as oil, coal and gas.

Fuel Wood - Wood that is burnt to provide energy.

Gersmehl Model - Shows the transfer of material between the vegetation & animals (biomass), soil and litter (dead vegetation).

Growing Season - The time of the year when temperatures and precipitation levels are high enough for plants to grow.

Heathland - Low-lying land with small vegetation and acidic soil.

Leaching - A process in soils where minerals are washed away by water (usually rainfall).

Litter - Organic matter (e.g. leaves) that falls onto a forest floor.

Logging - The process of cutting down trees for wood.



Migration - The seasonal movement of animals.

Moorlands - Found in upland areas, often have small vegetation in low-nutrient, acidic soils.

Nutrient Cycling - The transfer of nutrients through an ecosystem, from the decay of organic material into the production and energy of living organisms.

Nutrients - Elements or compounds that support the growth of plants and animals, such as phosphates, potassium, magnesium, and nitrogen.

Open-Cast Mining - A mining technique where an area is cleared and resources are mined close to the surface, rather than underground (also called strip mining).

Plantations - Farms where crops are grown in large amounts with the intention to sell for a profit.

Producers - Organisms that convert energy from the environment (mainly sunlight) into sugars (glucose).

Savanna Biome - A biome located around 15-30° North and South of the Equator, characterised by high temperatures, very dry summers and very wet winters.

Selective Logging - A form of logging where only certain trees are cut down to reduce the environmental effects of logging.

Slash-and-Burn - A farming practice where plants and trees are cut down and then purposefully burnt to clear the area.

Subsistence Farming - Agriculture that is intended to produce only enough food for the farmer and their family to eat.

Sustainability - Managing resources and activities in a way that meets the demands for the present, while considering the impacts this will have for future generations.

Sustainable Forestry - Management strategies that work to reduce the environmental impacts of commercial forest use, allowing forestry to continue into the future at the same rate.

Temperate Grassland Biome - A biome located in non-coastal areas around 30-40° North and South of the equator, characterised by low precipitation and grasses as the major vegetation.

Tropical Rainforest Biome - A biome located near the equator, characterised by very high precipitation and sustained warm temperatures.

Tundra Biome - A biome located in the far Northern hemisphere, characterised by very cold conditions and permanently frozen soils.

Urbanisation - The increase in the proportion of the population living in urban areas.

Understory - The layer of a tropical rainforest that lies beneath the canopy but above the forest floor.



Wetlands - Saturated land (high water content in the soil) which can be called swamp-like or marshland.

