Human Impact on Ecosystems

Humans can have many effects, both positive and negative, on their environment and the ecosystems which exist within it. Some of these human actions can directly affect the ecosystem, whereas others can be indirect.

Human Actions with Negative Consequences

Unfortunately, the negative impacts that human action can have on an ecosystem occur much more easily and readily than the positive effects. There are many destructive human actions carried out every day, which many people will not even notice.

Pollution exists in many forms: air pollution, litter or water pollution. Air can be polluted by large amounts of particles released from vehicle exhaust fumes and other emissions. These particles can block or reduce the sunlight reaching plants and this affects their ability to photosynthesise and grow.

Some air pollutants, such as sulphur dioxide, can lead to acid rain if the chemical gases dissolve in the water vapour, which can completely destroy whole forests and environments.

Remember

An ecosystem is the environment and all the living things within it. Anything that affects the environment and the habitat where an organism lives, will affect the organism. This can have a knock on effect to the food webs and feeding relationships too.



A forest destroyed by acid rain

Human litter, particularly food containers, can be very enticing to curious animals. Animals can become trapped in litter and die, or consume it and then become unable to digest it.

Humans require a lot of resources from the environment, such as wood for fuel and building material. Removing this from the environment can be damaging to the ecosystem through loss of habitat and even directly removing the food source of some animals which feed on the foliage of the trees.

Food webs and the relationships between organisms can be affected directly by humans when they present direct competition for a prey. This can be through intensive fishing or hunting and poaching of animals.

Human Actions with Positive Consequences

Humans can help to conserve and protect the environment and their ecosystems through activities such as recycling, litter picking and careful disposal of waste. Also through reduced use of vehicles and electricity. Other activities which can eventually have a big impact are planting trees and protecting green spaces locally.

