

Chapter 19: Conservation and Pollution

Conservation is the protection, preservation and careful use of our natural resources.

These resources include the land, trees, rivers and lakes.

However, we destroy these by dumping our wastes, cutting down trees and over fishing. This leads to plants and animals becoming extinct.

Pollution.

Pollution is adding unwanted wastes to the environment, causing damage to it.

Types of Pollution.

1. Air Pollution

- This is the release of smoke, sulphur dioxide and carbon dioxide into the atmosphere by burning.
- This causes acid rain which damages plants.
- This can also cause global warming.
- Smoke can cause lung disease.



Fig. 1 Air pollution over Santiago, Chile.

2. Water Pollution

- Water gets polluted by fertilisers, sewage (slurry) and oil.
- Fertilisers and sewage cause a green scum to form on the surface which prevents sunlight to reach the underwater plants.
- Oil lays on the surface of water. This kills plant and sea life and destroys beaches.

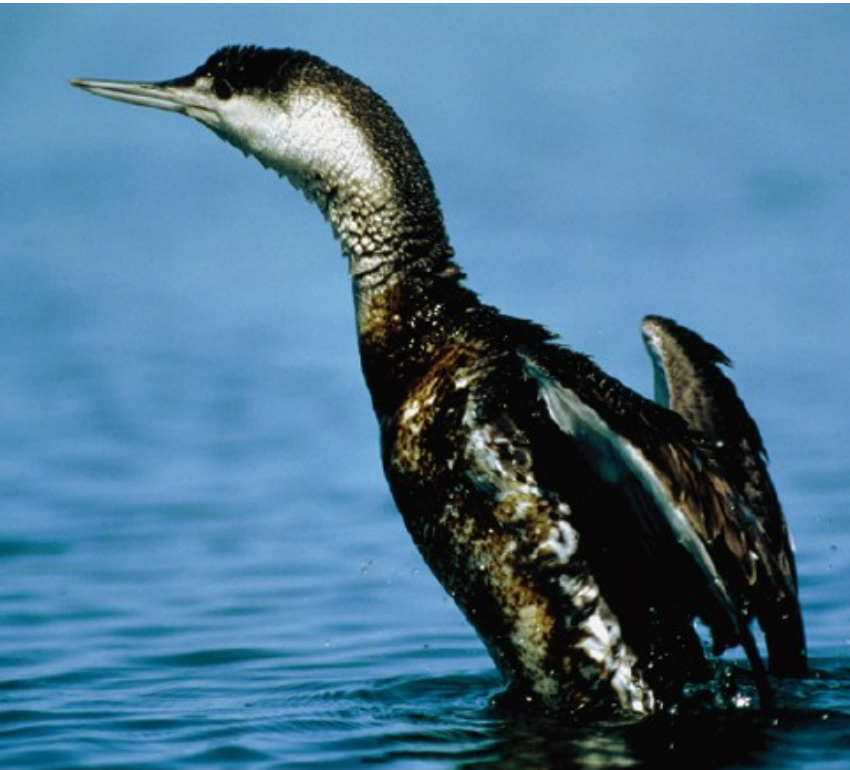


Fig. 4 Crude oil spills destroy the coastline and kill countless marine wildlife.



Fig. 3 Overuse of artificial fertilisers and pesticides cause pollution.

3. Soil Pollution.

- Soil pollution is caused by pesticides, artificial fertilisers and acid rain.
- Acid rain makes the soil acidic and reduces soil fertility.
- Pesticides are used to kill weeds, but they eventually get absorbed into other plants. This moves up the food chain

Waste Management.

Wastes are materials no longer needed and which must be disposed of, e.g. household waste, industrial waste, medical waste and sewage.

Ways to dispose of waste.

a. Landfill Sites.

- Rubbish is buried in the ground.
- These sites produce methane gas which causes global warming.



Fig. 6 Landfill sites are commonly used to manage wastes.

b. Dumping at Sea.

Nuclear waste is dumped at sea. This could cause a build-up of radioactive substances in the sea.

c. Incineration.

This is where waste is burned. This releases sulphur dioxide and other gases into the air.

d. Recycling

Recycling is where household waste is reused, e.g. glass, paper and plastics.

This saves on raw material which may be scarce and reduces pollution.



Fig. 7 'Bottle banks' allow individuals to recycle materials.

How Does Human Activity Affect the Environment.

Positive Effects	Negative Effects
Recycling	Illegal dumping
Use of renewable energy	Burning fossil fuels leads to global warming
Sewage treatment plants	Water pollution by sewage waste.