

Chapter 18 - Conservation, Pollution and Waste Management

Conservation is the protection and careful management of our natural resources.

In Ireland the Corncrake and Barn owl are endangered species because their habitat (where they live), is being destroyed.



Can you think of any other endangered species in the world at the moment?

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How Humans are Endangering Nature

Agriculture - gives us foods, cereals, and milk. Hedgerows and forests are destroyed and chemicals used can pollute rivers.

Roads and Houses - destroy natural habitats of animals and plants.

Insecticides - are sprayed to kill certain insects but can also kill the wrong ones.

Over-Fishing - means that small young fish are caught and not put back in. This means they don't have baby fish and soon the fish will go extinct. This affects bigger animals, other fish and us.



What can we do?

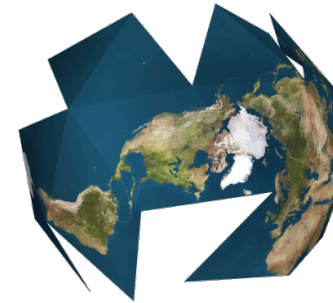
We can learn about the dangers facing Irish wildlife at www.npws.ie and www.enfo.ie

We can join local conservation groups and take part in clean-up events.

We can follow the [countryside code](#).

We can support **zoos** with breeding programmes for endangered animals.

We can lobby government about new roads to make sure no harm is done to wildlife.



Pollution

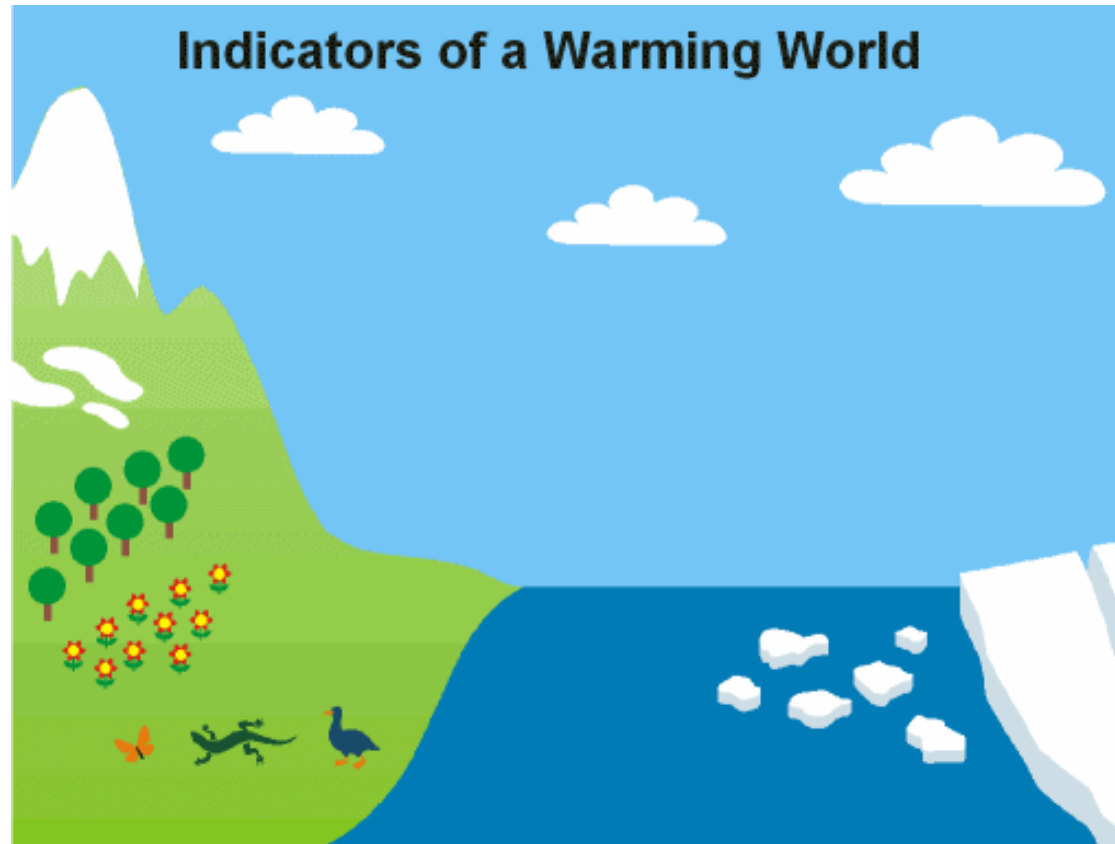
Pollution is the addition of harmful substances to the environment

1. Air Pollution -

The main cause of air pollution is the burning of fossil fuels.



CAUSE	EFFECT
Smoke and dust	Irritate the linings of the bronchii. This can cause bronchitis in humans. Smog – a mixture of smoke and dense fog is equally harmful.
Sulfur dioxide	Prevents plants from being able to photosynthesise. When it combines with rain it forms ' acid rain ' which wears away stone buildings and kills plants.
Carbon monoxide and lead	Produced by burning 'leaded' petrol and diesel. Carbon monoxide and lead are poisonous to humans.
Carbon dioxide and methane gas	Cause the ' greenhouse effect ', i.e. the warming of the earth. This causes global warming and increased flooding.
CFCs (chlorofluorocarbons) from fridges and aerosols	Reduce the ozone layer , which protect us against UV light. Excess UV light causes skin cancer.



2. Water Pollution -

Water pollution is caused by various substances being dumped in rivers, lakes and the sea.

Algal Blooms - algae grows in polluted water. It blocks sunlight and starves fish of Oxygen.



CAUSE	EFFECT
Excess fertiliser and slurry	Less oxygen, causing fish to die.
Untreated sewage	Decomposers use up the oxygen, causing fish to die.
Oil	Poisonous to birds and fish. Coats feathers of sea birds preventing flight. Unsightly on our beaches.
Litter, e.g. plastic packaging	Unsightly and can be a health hazard.



3. Soil Pollution -

Soil pollution is caused by pesticides and excess fertilisers getting into the soil.



Waste Management

1. Landfill sites - are basically holes in the ground.

Advantages - they are easy to fill and produce natural gas (methane) that can be used as fuel.

Disadvantages - They can cause pollution of soil, attract rats and gulls. They also smell and look unsightly. We are running out of space.



Plastics

Are difficult to recycle.
We need to use Biodegradable plastics now.

How many do we use?



Good idea?



Packaging



2. Incineration - is the burning of waste at high temperatures.

Advantages - large amounts of waste can be burnt.
It is clean and efficient if done properly.

Disadvantages - Large amounts of ash are produced.
Poisonous fumes can be produced if done at too low a temperature.



3. Recycling - something can be reused over and over.

Composting is reducing organic waste in landfill sites. The waste is decomposed using bacteria and fungi.



The life of a Can



Waste Minimisation

Reduce – use less, minimise waste.

Reuse – use again for different purpose.

Recycle – change, recover some material and use again.



Attachments

[full_list.asp.htm](#)