



Endangered Wildlife



If you look up the meaning of the word '

endanger

' in the dictionary you will read something like 'to bring into or expose to danger or peril'.....this is the position that thousands of species of animals and plants are in today.

Extinction

is a word associated with

endangered

. Almost everyone knows that this rather frightening word means 'to wipe-out and completely destroy'. We all know the phrase - "

extinction is for ever

"!

Life began on Earth more than 3 billion years ago. Species have been disappearing from our planet throughout this time, long before

Homo Sapiens

appeared (around one million years ago). The story of the dinosaurs is a familiar one. No-one is absolutely certain why they became extinct 60 million years ago but their disappearance was a natural one and new types of animals evolved to replace them.

What we can be certain of is that extinction of species was rare before humans established themselves on the earth. It is really only during the last 300 years that the rate of extinction has speeded up and this has coincided with the enormous increase in the world's human population during this time. By 1650 the world population was 500 million. Today it is over 6000 million (6 billion)!



All these people have put such pressure on the lives of other living things that in the last 300 years at least 300 species of vertebrates (animals with backbones), 100 species of invertebrates (without backbones) and thousands of species of plants have become extinct.

Today around 5 000 species of animals and over 25 000 species of plants are endangered. Since 1900 more species than ever before have become extinct and scientists think we may even be losing one species a day at the moment!

Although the rate in increase of the human population is slowing down in some parts of the World, it is

continuing to escalate in others. Allowing for the death rate, about one million more humans come into the world every week! This increase obviously puts increasing pressure on wildlife. The following pages discuss some of the reasons why...

Direct Killing and Collection of Animals and Plants

Some species are killed purely



for human profit or enjoyment. Animals are killed for meat, clothing, oil, feathers, eggs, trophies and ornaments. Many animals have been, and still are, captured in the wild for the live pet trade and some plants have been dug up or picked in large numbers for collectors. Of course, humans have always hunted and killed wildlife but in the distant past it had been mainly for essential food and clothing. It is only relatively recently that animals and plants have been killed or collected in large numbers.

Thousands of crocodiles have been killed for their skins!

Habitat Destruction

A habitat is any natural region where wildlife lives undisturbed e.g. forest, pond, marsh or desert. Most animals and plants which are endangered have become so, not because they have been killed on purpose but because their habitats are being destroyed.

Human activities have changed or destroyed habitats for thousands of years. The natural habitats in almost every country in the world have been affected in some way. Let us take Britain as an example. Nowadays most of the British countryside consists of fields of grass grown specially for cattle and sheep or cereal crops for humans. If you had lived about a thousand years ago, the countryside would have looked very different for most of Britain was covered with forest, made up of broadleaf trees such as oak, ash and beech.

Now there are only small pockets of woodland scattered across the country, one of the largest areas being the New Forest in Hampshire. Throughout the centuries humans have steadily cut down the trees to make room for the human population which has increased enormously particularly during the past 200 years or so. The trees have been replaced by houses, factories, schools, roads, farmland etc. Hedgerows which were planted by humans as boundaries around fields have, to some extent, replaced woodlands, providing homes for many animals and plants. However, even many of these have been destroyed, mostly during the last forty

years, and are now regarded as a threatened habitat. Natural heathlands, chalk downlands, marshes, water meadows, hay meadows and ponds are also examples of Britain's disappearing habitats.

As you may imagine, this vast loss of habitats has affected the wildlife that lives in them. Large mammals such as the Brown Bear and the Auroch (wild ox) became extinct in Britain during the 10th Century mainly due to destruction of their forest habitat. Other British species of animals and plants have become extinct during the last few



hundred years and many more are endangered today. Although conservation groups are working to protect wildlife, natural habitats are still being destroyed.

In Britain, the common frog is in danger of losing its natural pond habitat.

Poisonous Chemicals and Pollution

Wherever humans have planted crops for food, poisonous chemicals have been sprayed on them;

insecticides

are used to kill insect pests and

herbicides

are used to kill weeds.

Artificial fertilizers

are added to the soil to increase the yield of the crops. If these chemicals are used in excess, some of them dissolve in rainwater and drain into rivers, streams and ponds, polluting the water and killing the wildlife.

The "weeds" competing with the farmers' crops are really wild flowers and many of these have become endangered through the use of herbicides. Insects rely on plants for food and breeding sites so the number of these are affected by a reduction in the number of plants. Many birds depend on insects for food so the numbers of birds may be affected by the use of both insecticides and herbicides. One of the reasons why the Barn Owl is endangered is due to a shortage of insects and it may also be poisoned by eating insects affected by chemical sprays.



The case of

DDT

and other chemicals known as

organo-chlorines

is well known. These were first used extensively in the 1950s, sprayed onto crops to kill insect pests. Unfortunately, after a few years it was noticed that birds of prey were rapidly declining in numbers and thousands of seed-eating birds were dying. By the 1960s the once common sparrow hawk was a rare bird in Britain. The sparrow hawk's prey were the seed-eating birds which were carrying the poisonous insecticides in their bodies. Consequently many sparrow hawks and other birds of prey were being indirectly poisoned by the chemical sprays. The organo-chlorines also caused many birds to lay thin shelled eggs, which cracked easily.

Research showed that the chemicals were entering the

food chains

and being stored in the fat of the animals' bodies. For example, a thrush may eat snails which have eaten a sprayed cabbage plant. The thrush may not have eaten enough poison to be actually killed but a sparrowhawk eating several thrushes accumulates so much of the poison that it is killed. The chemicals become more concentrated as they travel up the food chain. Even most humans still have small amounts of organo-chlorines in their fatty tissues although these chemicals had been withdrawn from use by 1976. They are still used, however, in some Third World countries. By the 1980s the sparrowhawk population had recovered dramatically and it is once again a common bird.

This example does show just how dangerous the use of chemicals in the environment can be.

When endangered wildlife is studied quite often it is only the animals which are considered. Of course the animals are important, but we must remember that every living creature depends on plants for food. Plants also produce oxygen to enable animals to breathe and many plants are valuable as medicines.

As mentioned earlier, some plants are endangered through collectors such as the Venus fly-trap and some tropical orchids, but most threatened plants have become so through the destruction of their habitat. Once very common plants have almost disappeared because of the way humans have changed the land. For example, the Egyptian Papyrus, a type of reed, had been used for thousands of years for all sorts of things such as paper, medicine, boats, baskets, food etc. Then, when changes in the irrigation methods on the river Nile were introduced, this valuable plant almost completely disappeared. It was thought to be extinct until 1968 when a few plants were found in an undisturbed waterway.

Orchids have been collected from rainforest, causing many species to become endangered.



Over to you - Ideas for Projects

Choose any habitat that is under threat, e.g. rainforest, pond etc. Find out why it is in danger. What species of animals and plants live in your habitat? Are any of them in danger?

Extinct Animals

Since 1600 several animals have become extinct worldwide, e.g. Dodo, Quagga, Tarpan, Great Auk, Passenger Pigeon. Find out what these looked like, where they lived and why they became extinct. Can you find more examples?



Endangered Animals

Find out all you can about one particular endangered animal. Write a story about a day in the life of one of these animals. Don't forget to describe the difficulties the animal has to face from humans.

Humans in Danger

Remember that humans can become endangered too! Many native tribes have become extinct because of the interference from so-called "civilized Man". Choose a native tribe, perhaps a rainforest one that you've heard about, which is under threat today. Describe the people's lives and the pressures on them.

What can be done to help?

People all over the world are working to help save endangered wildlife and their habitats. In what ways are they helping? Is there anything you can do to help?

Useful books

Children's Atlas of Endangered Animals

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World International Publishing Ltd.

Common & Endangered Animals of the UK, John Gale

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'Considering Conservation' series, Dryad Press

Pressures on the Countryside, Derrick Golland

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'Considering Conservation' series, Dryad Press

Rainforests, Rodney Aldis

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'Ecology Watch' series, Cloverleaf (Evans Brothers Ltd.)

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