FACTSHEET

Endangered Animals of the World

Life began on our planet about 3,500 million years ago, The first living things were found in the sea, and over the course of millions of years, from these early life forms, a rich variety of animals has descended. Through the process we call
evolution
, animals have become adapted to enable them to live in all parts of the world, sometimes in the most hostile environments.

Almost 600 million years ago, the
invertebrates
appeared i.e. those animals without backbones - insects and other minibeasts. The earliest
vertebrates
i.e. animals with backbones, were in the form of primitive fish and appeared around 500 million years ago. From these, all the other fishes descended, as well as amphibians, reptiles, birds and mammals.

The animal kingdom is enormous and we do not know for certain how many species there are in the world. Around 1.5 million species of animal have been named and described by scientists - and over a million of these are insects. It is known that there are about twice as many animals in tropical rainforests than in any other habitat, and it is here that there are likely to be countless numbers of species yet unknown to science. It has been estimated that the total number of insect species alone could be around 30 million!

It is just possible, but unlikely, that there are a few large animals remaining to be discovered, but what we can be sure of is that the most numerous large animal on Earth is Homo sapiens - the human! Modern man appeared about 30,000 years ago and has increasingly come to dominate the planet. The steady increase in population was speeded up by advances in civilization such as the Industrial Revolution and better health and medical care.

The rate in increase of the human population is slowing down in parts of the Northern Hemisphere, but it continues to rise in Third World countries, despite the effect of famine, floods, disease and war. Allowing for the deathrate, over one million more humans come into the world each week!

This population explosion means that millions of people suffer from hunger and disease, and more and more wild places are taken over, causing animals and plants to suffer too.

The Increase in Population

It took from	to reach
Neolithic Age to birth of Christ (10,000 years)	300 million
Birth of Christ to 1650 (1650 years)	500 million
1650 to 1850 (200 years)	1 billion
1850 to 1925 (75 years)	2 billion
1925 to 1962 (37 years)	3 billion
1962 to 1975 (13 years)	4 billion
1975 to 1987 (12 years)	5 billion
1987 to 1999 (12 years)	6 billion
1999 to 2007 (8 years)	6.6 billion

Extinction is for Ever!

As almost everyone knows, to become extinct is to be gone forever. Even before man's arrival on Earth, species became extinct quite naturally. Natural extinction happens when a species declines in numbers gradually but steadily at the end of its evolutionary period on Earth. The length of this period depends on how well a species can adapt to changes in climate and changes in other animals and plants around it. This process of extinction can take a very long time - sometimes several million years - and the extinction of one species is immediately followed by the appearance of another in a continuous cycle.

The case of the dinosaurs is the most well-known example of natural extinction. These reptiles appeared on Earth about 200 million years ago and dominated both land and sea for almost 100 million years. It is not

certain why the dinosaurs became extinct, but their disappearance was a natural one and new species of animals evolved to replace them.

The rate of extinction has speeded up unnaturally over the last 400 years, rising sharply since 1900. This increase in the rate of extinction is directly related to the increase in the human population over the same period of time. The vast number of humans has caused great damage to the planet, as wild habitats have been taken over, forcing animals and plants into smaller and smaller areas, until some of them have become extinct. We have also polluted some habitats with chemicals and refuse, making them unfit for wildlife. These causes of extinction are known as

indirect destruction

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Animals may also become extinct through

direct destruction

. This includes the hunting and capturing of animals. Man has always hunted and killed wildlife but when early humans lived more in harmony with nature, they killed animals for essential food and clothing. When firearms were invented mass destruction of species was possible. Animals have been, and still are, killed for meat, clothing,medicines, feathers, eggs, trophies, tourist souvenirs - and sometimes just for amusement. Some species are still captured in the wild for the live pet trade, even though their numbers are dwindling.

The extinction of at least 500 species of animals has been caused by man, most of them in this century. Today there are about 5,000 endangered animals and at least one species dies out every year. There are probably many more which become extinct without anyone knowing.

"Dead as a dodo"

The dodo has become a symbol of extinction. It was a turkey-sized flightless pigeon which lived on the island of Mauritius. When sailors landed on the island for the first time in the sixteenth century, they killed the helpless bird for food. The dodo's eggs and young were eaten by dogs, cats, pigs, rats and monkeys which man had introduced to the island. The dodo, unused to predators, very quickly declined in numbers - and it was extinct by 1681.

Greater Horseshoe Bat

There are fourteen species of bat in Britain and all of them are endangered. The greater horseshoe bat is one of the rarest. One reason for their decline is the destruction of suitable roosting sites, such as old buildings and hollow trees. They have also suffered from the use of insecticides (poisonous chemicals sprayed on to crops to kill harmful insects) which have deprived the bats of their insect food.

Siberian Tiger

Cold, snowy Siberia, in the USSR, is home to the largest of all the tigers, the Siberian tiger. It is highly endangered and there may be fewer than 200 in the wild, probably all in special nature reserves. Hunting and loss of habitat have reduced their numbers.

Loggerhead Turtle

This threatened reptile lives in the Mediterranean Sea, as well as the Black Sea and Atlantic Ocean. In the past its main dangers were hunting for its shell and meat. Now it has to put up with tourists disturbing the sandy beaches where it lays its eggs. In Turkey, hotels have been built right on its breeding sites. Out at sea, the turtles sometimes become entangled in fishing nets and drown.

Northern Bald Ibis

The Ancient Egyptians used to depict this bird in their heiroglyphic writing, but it no longer lives in Egypt. Colonies of this ibis are now found in Algeria, Morocco and Turkey. Part of the ibis' decline is due to natural causes. It nests high above the ground and its eggs are so round that some of them roll out of the nest and break. The largest colony of the Northern Bald Ibis is in Turkey, but the use of pesticides on the marshes and

grasslands where it lives is reducing the numbers.

White Tailed Fish Eagle

Before man began polluting water habitats with pesticides, this spectacular bird of prey was much more numerous than it is today. In the Middle East, its population is now very small. The bird travels long distances in search of fish, and eating a number of poisoned fish causes the bird to lay infertile or thin-shelled eggs which are easily broken.

Lion-Tailed Macaque

The habitat of this small monkey is India's tropical rainforests. Many of these forests have been cleared and replaced with tea and coffee plantations. Unlike some other animals, the lion-tailed macaque has not been able to adapt to these new habitats. Poachers have also captured baby macaques, often killing their parents in the process, for illegal export to collectors.

Mandarin Duck

The mandarin duck (the brightly coloured male is illustrated) may often be seen on ponds and lakes in Britain, but its native home is across eastern Asia, in Russia, China, Korea and Japan. It may be found on water

which is near forests, but the forests are being felled and the water drained, making the duck more and more endangered.

Mountain Gorilla

The Virunga volcanoes region in eastern Zaire, Rwanda and Uganda is the only home of the highly endangered mountain gorilla. It depends on dense forests for survival and these are steadily being cut down to make way for crop growing and livestock grazing. The gorilla is protected by law, but despite this, some of its so-called sanctuaries have been cleared, and hunters kill them for food and trophies.

Jackass Penguin

The jackass penguin is the only penguin to be found in Africa, and it was once the country's most common sea-bird. It lives off the coast of Namibia and South Africa, and the waters here have been over-fished by humans, depriving the birds of their food supply. Oil pollution also threatens them, as does the taking of their eggs for food.

Blue Whale

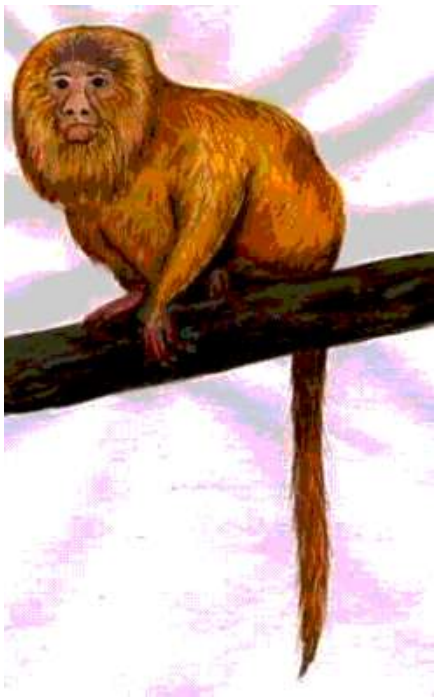
The largest animal ever to have lived on our planet, the blue whale, lives mainly in the cold waters of the Arctic and Antarctic, where it finds enough plankton to sustain it. It migrates to tropical seas to breed. The blue whale has been a protected species since 1966, but thousands were killed up until then. During the whaling season of 1930 to 1931 alone, 30,000 blue whales were killed by Antarctic whalers. Although their numbers have increased a little, there are probably less than 6,000 alive today. It will take more than one hundred years of protection before we can be sure that it will not become extinct.

Numbat

Sometimes called the banded anteater, the numbat was once common in the bush and forest of north-eastern and southern Australia. It is now only found in the most western part of eastern Australia. When man introduced predatory animals such as cats, dogs and foxes, these animals ate many numbats. Their numbers are still declining because their habitat is being cleared for farming and mining.

Komodo Dragon

The Komodo dragon is the largest lizard in the world and lives on a few small Indonesian islands. It is a powerful predator and can measure as much as 3 metres in length. There are about 3,000 Komodo dragons in total, but they seem to be slowly declining. They live mainly on uninhabited islands, so are in no great danger from humans. Scientists think that natural causes are to blame. There are more males than females alive, and also the natural plant life seems to be changing and the lizards are not adapting well to their new environment.



Golden Lion Tamarin

This tiny monkey is one of the most endangered of all animals in South America. The few that are left, about 150, are restricted to the only remaining coastal rainforest, southwest of Rio de Janeiro, Brazil. Forest destruction is the main reason for the tamarin's decline, but it is also in danger of being captured alive and sold as a pet - a strictly illegal practice which still goes on in secret. Some captive-bred golden lion tamarins have been put back into the wild in a protected area of forest.

Spectacled Bear

This bear gets its name from a yellowish mask which makes it appear to be wearing a pair of spectacles! It lives in the forest-covered mountains of several South American countries. As the forests are cleared for farming, the bear's numbers fall. Even though it is protected by law, the spectacled bear is still killed by poachers for its fur, meat and fat.

Californian Condor

Today there are no Californian condors in the wild - the only living ones left are kept in zoos. During the nineteenth century this large bird of prey lived in the mountains of many areas of North America. It started to decline last century when it was killed by gold diggers who collected its long black feathers. Disturbance of its habitat by tourists, pesticides and low-flying aircraft also contributed to its final disappearance in the wild.

Black-Footed Ferret

The black-footed ferret is America's rarest mammal. It is probably on the edge of extinction in the wild. This ferret hunts prairie dogs on open grassland, and as this habitat has been turned into farmland, farmers have

tried to eliminate the prairie dogs by putting poison down their burrows. The black-footed ferret has also been poisoned by accident
.

Hooded Seal

As with all animals that live in the oceans and seas, the biggest threat to the hooded seal is hunting. It lives in the cold waters of the northern hemisphere, stretching from Canada and Greenland in the west across to Iceland and Norway in the east. The male has a strange-looking hood, or pouch, of skin above its nose which it inflates when excited. The sealÕs population has been badly affected because both adults and young have b een over-hunted, killed for their skins, meat, fat and oil.

Is it Importan to Save Animals From Extinxtion?

Some people may ask "why bother with conservation?" We now realise that it is important to maintain the planet's biodiversity, that it is the richness (variety) of animal and plant life, its abundance and wild habitats. From a selfish point of view, we humans never know how valuable a species of animal or plant may be for us in the future, perhaps as food, medicines or specific information.

Saving Endangered Animals!

People all over the world are working to help save endangered animals from extinction. There are conservation organisations which try to make people aware of the problems facing wild animals. Some of the ways in which they are being saved include
habitat protection
,
captive breeding
, setting up
nature reserves

and parks
and using
alternative products
in place of products from rare animals. Governments can help by making
international agreements
between countries to protects animals (many countries, for example, have agreed to stop hunting the blue whale). Scientists are setting up
gene banks
in which they keep an animal's genetic material (the 'building blocks' of a living thing) in suspended

animation. This technique may make it possible in the future to 'grow' a new animal of the same species.

You can help too!

The first step towards saving animals is to learn as much as possible about them. If we know where and how they live, and what they need to survive, then it will be easier to help them. It is also a good idea to learn from our mistakes of the past, such as destroying too much rainforest and over-hunting animals. To ensure the survival of the world's animals we must learn how to keep
'sustainable populations'
alive i.e. populations with enough numbers for the animals to survive on their own. The dodo and all the other which man has made extinct became so because their populations fell below a sustainable level. It is worth keeping in mind that those animals may well become the endangered animals of tomorrow.

Here are Some Ideas for Research Projects

1. British Endangered Animals.

Sometimes we forget that we have quite a number of endangered animals in our own country that need protection. We may even be able to help a few of them by providing a suitable habitat in our own back gardens!

Choose one species of British endangered animal and find out as much as possible about its life and the reason for its rarity. What conservation measures are being carried out to prevent its extinction?

2. Extinct Animals.

Since 1600 about 500 species of animals have become extinct. As well as the dodo, we used to have the

quagga
,
tarpan
,
great auk
,
passenger pigeon
, and many others.

Choose any three extinct animals. What did they look like? Where did they live? Why did they become extinct?

3. Helping to Save Endangered Animals.

As we have seen, there are several ways in which people are trying to save threatened animals from extinction.

Imaging you are setting up a new conservation organisation to help a particular endangered animal. Which animal are you targeting? Where does your animal live? Why is it endangered? Explain in detail how you intend to save it from total extinction.