

THE ATLAS OF
ENDANGERED
ANIMALS

WILDLIFE UNDER THREAT AROUND THE WORLD

PAULA HAMMOND

 Marshall Cavendish
Reference

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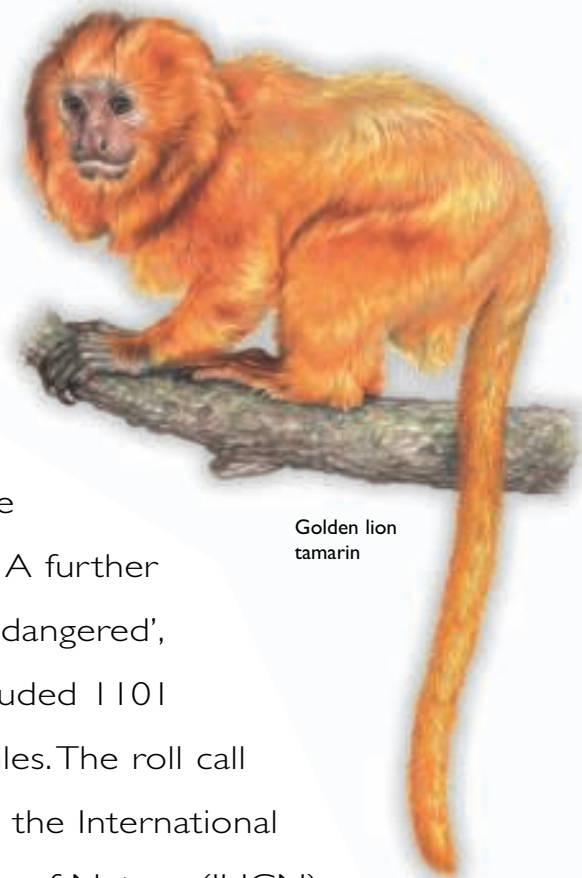
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Introduction

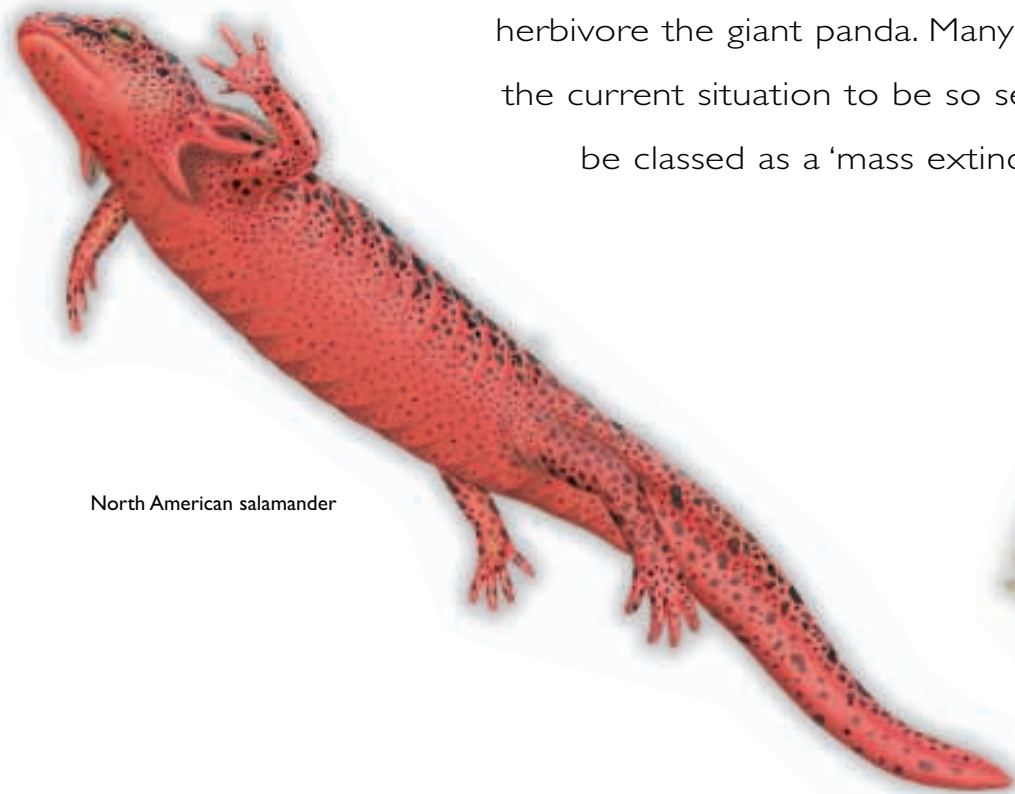
Nature is in danger. Worldwide, a total of 733 animal species (mostly insects) are thought to have become extinct in 2004. A further 7180 were listed as being 'Critically Endangered', 'Endangered' or 'Vulnerable'. This included 1101 mammals, 1213 birds and 304 reptiles. The roll call of those at risk – compiled by the International Union for the Conservation of Nature (IUCN) – is surprisingly broad. The great white shark is a fearsome predator which has been so successful as a species that sharks as a group have sat at the top of the food chain for 400 million years. Yet it appears on the IUCN's 'Red List' of threatened species alongside that gentle herbivore the giant panda. Many scientists believe the current situation to be so serious that it can be classed as a 'mass extinction event'.



Giant panda



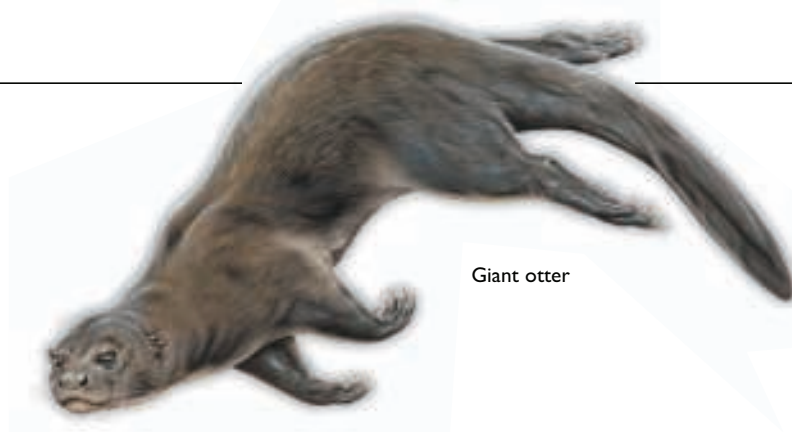
Golden lion tamarin



North American salamander



Numbat



Giant otter



Desert tortoise

Mass extinctions are nothing new. They happen with surprising regularity. We know that at least five have occurred in our planet's history. This includes the one that wiped out the dinosaurs some 65 million years ago. What these past extinctions had in common was that they were the result of catastrophic natural disasters. Today, it is what we are doing that is proving to be every bit as destructive as Mother Nature: hunting, trading in animal products, introducing species from one region to another, and destroying natural habitats. Species are now dying out at a rate up to 1000 times faster than before the arrival of *Homo sapiens* – human beings. Now the continued survival of the endangered animals featured in this volume depends on the help and support of the very species that has done them the most harm – us.



Cassowary



Bengal tiger



Africa

Africa is a continent of spectacular natural beauty: a vast landmass that encompasses rolling, green grasslands and golden beaches, rain-soaked tropical forests and parched desert sands.

This vast continent – the second largest – covers around one-fifth of the world’s entire landmass, and about 75 per cent of it is virtually uninhabited. However, Africa’s population is booming, and deforestation and industrialization present a real threat to the continent’s wild, natural beauty. Already pollution, overfishing and the introduction of non-native fish species have wiped out half of Lake Victoria’s 500 native species. African rainforests are vanishing at an alarming rate of around 142,450 square kilometres (55,000 square miles) a year. And in the Sahel – a strip of grassland dividing the mighty Sahara Desert in the north from the wetlands in the south – a vast amount of intensive farming is slowly but surely turning the region into an arid wasteland.

In 2004 alone, more animals became extinct in Africa than in all of the other continents put together. Such environmental concerns are not unique to Africa. Unfortunately, though, Africa has many other problems to face. It contains many of the world’s poorest countries, and war and famine are commonplace. Conservation, understandably, is not always the first priority. Despite such problems, however, Africa continues to create laws to protect its wildlife. All across the continent, countries are cooperating to create huge animal sanctuaries, such as the Serengeti National Park in Tanzania, which stretches all the way to the Masai Mara Reserve in Kenya, some 193 kilometres (120 miles) away. Such nature reserves represent a ray of hope for the continent’s dying species.

African Wild Ass

Looking like a curious cross between a horse and a zebra, the African wild ass has the dubious distinction of being one of the world's rarest animals. It was once a common sight as far afield as Morocco, the Sudan, Somalia and the Arabian Peninsula, but now only small, isolated groups of this sure-footed mammal survive in the wild.

Key Facts

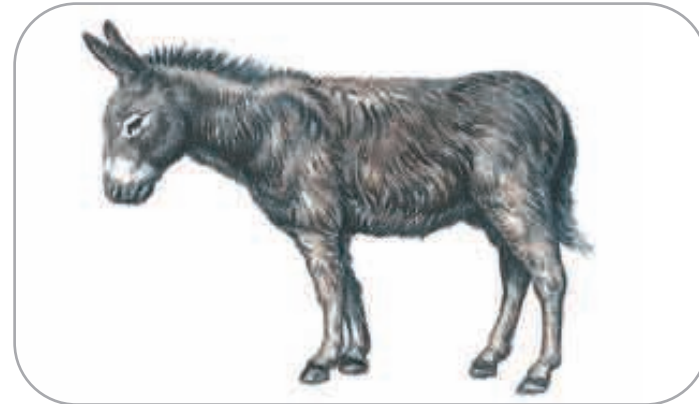
ORDER *Perissodactyla* / FAMILY *Equidae*
GENUS & SPECIES *Equus asinus*

Weight	275kg (606lb)
Length	Head and body 2.1m (6ft 9in)
Tail	45cm (17.7in)
Shoulder height	1.4m (4ft 6in)
Sexual maturity	2 years, but rarely breeds before 4–5 years
Mating season	Peaks during wet season (July to August)
Gestation period	About 360 days
Number of young	1
Birth interval	1 year
Typical diet	Grazes grasses, sedges and forbs; browses shrubs and bushes
Life span	12–22 years



Teeth

The teeth of the wild ass show clearly that this species lives primarily on grass – with large, chisel-like incisors for cutting and flat, grinding teeth to help break up tough vegetation.



Domestic ass

Although they have shorter and stockier bodies, domestic asses are clearly descended from African wild asses. Like their free-roaming cousins, these hardy animals are natural beasts of burden.



Hooves

African wild asses have extremely narrow hooves, which enable them to walk steadily over uneven and rocky ground.



Ears

The African wild ass's large, upright ears can be swivelled around in almost any direction. This helps it to keep track of other members of the group.

The African ass (*Equus asinus*) is the wild version of the domestic donkey. Built to withstand the harsh conditions on Africa's sparsely vegetated scrublands, this naturally hardy little mammal has long been valued as a 'beast of burden' throughout the continent. Despite its value, there may be fewer than 570 left in the wild.

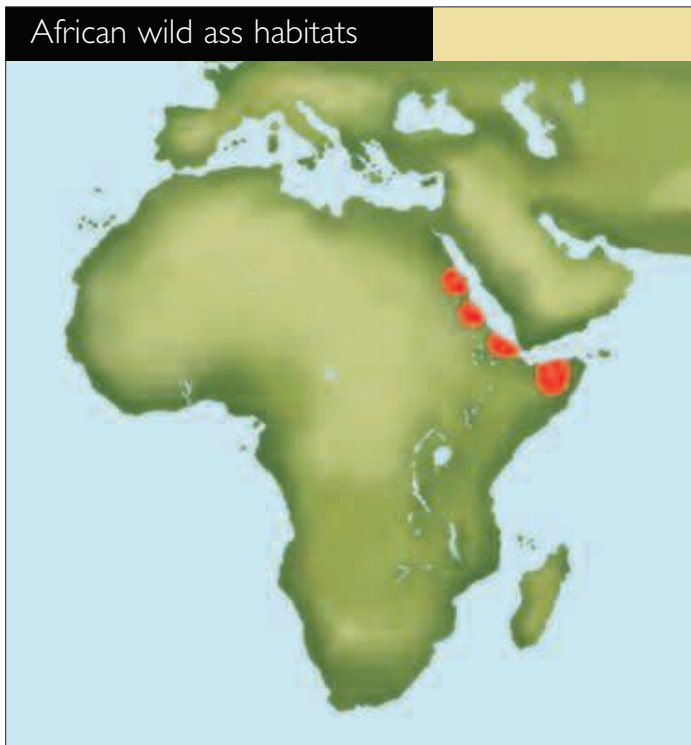
Horse of a Different Colour

Horses, asses and zebras all belong to the family Equidae and share a number of common traits: strong, muscular bodies, powerful hindquarters, hooves instead of feet, long necks, and eyes and ears placed high on a distinctive, almost triangular shaped head.

Despite these similarities, it is clear from their appearance that all three belong to different species. Asses are the smallest and stockiest of the three – growing to around 2m (6ft 6in) from head to tail and up to 275kg (606lb) in weight. Its mane is sparser and coarser than both that of the horse and zebra, its coat is generally grey to pale brown (which is darker in the dry season) and it has a white underbelly. Its two known subspecies, the Nubian wild ass (*Equus asinus africanus*) and the Somali wild ass (*Equus asinus somalicus*), also have some striping on the lower legs, like a zebra.

Desert Dwellers?

African wild asses are a hardy species and survive well in arid, semi-desert regions, hill and bush lands. Yet they are not natural desert dwellers. When food and water is scarce

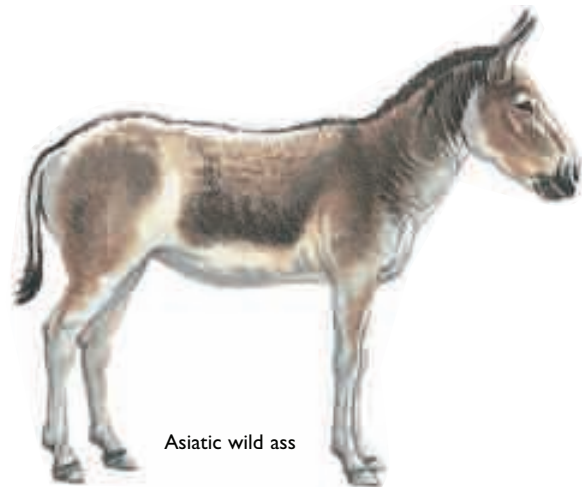


it is possible for a wild ass to lose up to one-third of its body weight and still survive, but most family groups choose to live within 30km (18.6 miles) of a fresh water source. Expectant and feeding mothers in particular need to drink every day in order to remain healthy. To conserve moisture, asses often retreat to a cool, rocky outcrop during the hottest part of the day. In fact, they are generally

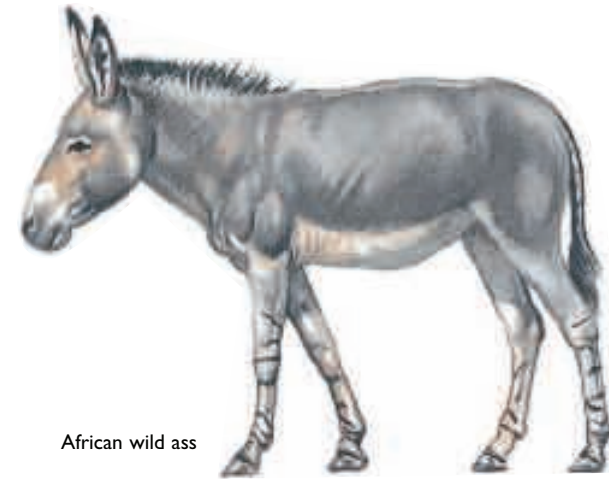
Comparisons

As these illustrations show, the Asiatic wild ass (*Equus hemionus*) is generally smaller than the African, with shorter legs, tail and ears. Like the African wild ass, Asiatic wild ass (*Equus hemionus*)

populations have also fallen rapidly in recent decades. So much so that the five surviving subspecies of this small, brown-coated donkey are variously classed as 'Vulnerable' and 'Endangered'.



Asiatic wild ass



African wild ass



In the cooler temperatures of early morning, a lone wild ass enjoys a leisurely breakfast.



The ass stops eating to investigate a figure on the horizon. Its raised ears indicate that it is alert to any potential trouble.



Each recognizing a family member, the asses touch snouts in a familiar greeting.



Head to tail, the asses may spend many minutes reinforcing old relationships with mutual grooming.

and nocturnal, which means that they are more active at dawn and at night, when temperatures are cooler.

Another clue to the fact that they are not natural desert inhabitants comes from their feet. Wild asses have a pointed, narrow hoof and tend to walk delicately on 'tiptoes'. This is ideal for the rocky and uneven terrain found at the edges of deserts, but bad on sand where broad, cushion-like pads, such those found on a camel's foot, are better at 'snow-ploughing' through the ever-shifting sand.

Threats and Conservation

During the 1980s, African wild ass numbers are believed to have fallen by as much as 50 per cent. Today, the species is classed as 'Critically Endangered', as are the Nubian and Somali wild asses. No one reason can be blamed for such a startling fall in the numbers of a once abundant

animal – rather, it is a combination of threats that has combined to bring this appealing little donkey to the brink of extinction.

In common with many equine species, wild asses have been captured and interbred with domestic species for centuries. Despite legal protection, they are routinely hunted for food and traditional medicines. Droughts and wars have taken their toll, too, while the growth of agriculture has restricted the animals' access to water, which is vital for its survival. The future of the wild ass hinges on a population of around 400, which is found in Eritrea. This is large enough to be considered 'viable', meaning that it is capable of sustaining and increasing its numbers. Asses are a resilient species, so it is possible that, given a stable and protective environment, the wild ass may yet live to roam Africa's bush lands once more.

African Wild Dog

With their large, rounded ears, tufted tails and mottled coats, African wild dogs are one of the most distinctive and appealing-looking members of the canine family. Once common throughout Africa's plains and savannahs, this sociable and attractive mini-predator is now facing extinction through much of its range.



Feet

These wild dogs are unique in that they have only four toes, instead of five. The dewclaw, which is sometimes referred to as the thumb, is missing in this species.



Coat

The Latin name for the African wild dog is *Lycaon pictus*. This means 'painted wolf' and refers to the yellow, black and white blotches on its coat, which are unique to each dog.

Key Facts

ORDER *Carnivora* / FAMILY *Canidae*
GENUS & SPECIES *Lycaon pictus*

Weight	20–30kg (44–66lb)
Length	
Head and body	75–100cm (30–40in)
Tail	30–40cm (12–16in)
Shoulder height	60–75cm (24–30in)
Sexual maturity	12–18 months
Mating season	Variable; when prey becomes locally abundant
Gestation period	70–75 days
Number of young	2–19; average 7–10
Birth interval	Roughly 1 year
Typical diet	Exclusively carnivorous; prefers big game, but will prey on hares, rodents and other small animals
Life span	About 10 years



A hundred years ago, the wiry, long-legged African wild dog would have been a common sight on the grassland plains and bushy savannahs of sub-Saharan Africa. Today, there may be as few as 4000 left in the world. Even in relatively protected environments, such as the Selous Game Reserve in Tanzania, there are believed to be fewer than 100 wild dogs.

A Family Affair

African wild dogs are sociable animals and live most of their lives in family groups. These groups are called 'packs', and are unusual in that all the males are related to each other and all the females are related to each other. This is because groups of related females leave the original group to form their own packs as soon as they reach maturity, which is at around two years of age. They will then join

with another group of males to form a breeding pack. Although only the dominant males and females breed, this is an amazingly democratic society, and the pack works together to look after the young. As it may take up to six months before a juvenile is able to hunt for itself, this is very much a full-time job for the pack. In fact, the pups remain the group's top priority even once they are weaned and able to eat meat themselves, instead of relying on food that has been regurgitated by other members of the pack. They are even allowed to eat first – before the dominant male and female.

Threats

The main problem facing the African wild dog is the same as that facing much of Africa's wildlife in general: loss of habitat. As populations grow, farms and towns expand out



Wild dogs are too lightweight to be successful lone hunters, so they do what they do best – hunt in packs.



Isolating a weak or young victim, the pack takes up the chase, all the dogs using their incredible stamina to wear out the prey.



As the prey starts to tire and slow, the dogs bite at their victim's legs and belly.



Eventually, injuries or exhaustion force the prey to collapse, allowing the wild dogs to move in for the kill.

into the countryside. Wild dogs are more adaptable than many other species, but they still suffer huge casualties as their traditional habitats are swallowed up by urbanization. As the available land shrinks, small, isolated wild dog packs are left without enough space in which to hunt.

The result is twofold. First, wild dogs are forced onto farmland, which puts them into direct conflict with humans. Secondly, they are forced to live in smaller and smaller packs. A healthy wild dog pack used to contain around 30 members. Now the average number is around 10. As packs rely on each other to find food, to baby-sit the young and to protect pups from predators, falling numbers make everyday living more difficult. African wild dogs are also susceptible to a variety of diseases, such as rabies and distemper, which they catch from domestic dogs.

Conservation

Despite legal protection, wild dogs are facing extinction in many countries. With so many more 'glamorous', high-profile animals under threat – and with resources stretched thin – wild dogs are generally not considered to be a priority. There are captive breeding programmes, but dogs reared in zoos often lack the necessary hunting skills to survive in the wild. Nature reserves have been of little help either. A dog pack can travel as much as 40 kilometres (25 miles) during the course of a hunt. Even in the largest nature reserves, this means that there simply is not enough space for the packs to roam freely.

African wild dog habitats



The last lifeline for this beleaguered species, however, may well come from an unexpected source. In the past, people came to Africa to hunt the wildlife. Now they come to admire it. Ecotourism is a growing phenomenon around the world and in Africa in particular, and this curious, multicoloured little dog is proving to be a popular attraction with visitors.

Comparisons

It may be surprising, but African wild dogs belong to the family Canidae, which is the same family as domesticated dogs (*Canis familiaris*), such as the greyhound. In fact, dogs, coyotes, wolves, jackals and foxes all have a common ancestor called a *Tomarcus*, which lived around 15 million years ago.



African wild dog



Greyhound