

Animal Rights, Endangered Species and Human Survival[†]

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Between half a million and 2 million species - 15 to 20 per cent of all species on earth - could be extinguished by the year 2000. Extinction of species on this scale is without precedent in human history.

The Global 2000 Report to the President, 1980

Since the year 1600, when records of this sort first began to be kept, over 350 known species and subspecies of birds and mammals have vanished from the face of the earth. Although a few animals have become extinct because of natural factors such as climatic changes, the vast majority of recent extinctions have been the result of human cruelty, greed and foolishness.

Humans have, in the last 2,000 years, exterminated about 3 per cent of the world's known mammal species. But over half these losses have occurred since 1900, and several times that percentage may now be endangered. Thus, the annihilation of wildlife has accelerated in modern, 'civilized' times, as more sophisticated methods of destruction have come into use.

During the last of the great geological eras - the Pleistocene, or Ice Age, which began about 1 million or 1½ million years ago and officially ended about 10,000 years ago - an incredible array of animal life evolved. But unfortunately for many of these life forms, a super-predator, *Homo sapiens*, also appeared during this period.

British zoologist James Fisher, in *Wildlife in Danger*, gives a detailed account of the devastating effect of humans on the world's Pleistocene animals and their role in completely wiping out many of the earth's giants. Throughout the world there were incredible arrays of giant birds, some so big that they could not fly and, indeed, did not need to. In North America there was the teratorn, the biggest bird of prey that is known to have lived. Europe had a giant flightless 'superswan' as well as the giant Maltese vulture, the last example of which is thought to have occurred at Monte Carlo 100,000 years ago. Until the seventeenth century Madagascar had the 10ft tall, half-ton elephant bird, whose eggs had a fluid capacity of over two imperial gallons, the equivalent of 200 chicken eggs. And the Indian Ocean islands of Mauritius, Reunion and Rodriguez had the famous dodo (extinct c. 1680) and other strange, flightless birds. In New Zealand flourished the giant, 12ft tall moas, the tallest birds the world has ever known, until they became extinct between 1500 and 1850.

Giant animals also roamed the earth. In North America there were giant bison, camels, beavers, elephants and even lions. South America had giant armadillos called glyptodons and mammoth ground sloths. In Europe forest elephants, hippopotami and huge bison and deer lumbered over the land.

In many cases the extinction of these animals appears generally to have coincided with the arrival of humans on the scene. Early humans are known to have been in Europe some 250,000 years ago, and as their hunting skills improved the Pleistocene giants were inevitably destroyed.

The impact of the arrival in North America of *Homo sapiens* was even more devastating for the wildlife paradise that once flourished there. According to a growing body of scientific theory, primitive tribesmen, perhaps from Siberia, first invaded North America about 12,000 years ago, crossing the Bering land bridge linking Siberia and Alaska and moving south through Canada.

[†] In PETER SINGER (ed), *In Defense of Animals*, New York: Basil Blackwell, 1985, pp. 118-132.

They discovered a population of large mammals which, having evolved in the absence of humans, were 'innocent' and unafraid of them, much as Antarctic animals are today. These animals were thus unable to cope with the new threat. It is theorized that these hunters, marching from Alaska through South America, exterminated most of these species of large mammals in about 1,000 years.

Many of these extinct animals are preserved in remarkably good condition in the famous La Brea asphalt tar pits of Los Angeles, California, and these 'specimens' give us a good idea of the fantastic variety of wildlife that flourished during this period. According to James Fisher's account in *Wildlife in Danger*, the La Brea tar pits have yielded fifty-four different species of Pleistocene or prehistoric mammals, twenty-four of which are now extinct, as well as 113 birds, twenty-two of which are gone. Extinct species found at La Brea include the huge short-faced bear and short-faced coyote; the tremendous dire wolf; the fabled saber-toothed cat, *Smilodon*; the giant long-necked camel or giant llama, *Camelops*, which measured 7ft wide; the giant lion, *Panthera atrox*, which was a full one quarter larger than modern African lions; 20ft long ground sloths; and bison 7ft high at the hump, with a 6ft spread between their giant horns. Other giant mammals of that era included the elephant-like mastodon; the huge-tusked mammoth with shaggy, red hair; and the giant beaver, weighing over 400lbs. It has been estimated that the extinction of these great herds of giant herbivores - bison, horse, mammoth - may have reduced the total weight of large mammals on the North American continent by an incredible 90 per cent!

The first extinction that was actually recorded appears to have been the European lion around AD 80. But it is since 1600 that the most accelerated rate of extinction has occurred. Since that time, according to James Fisher, thirty-six species of mammals and at least sixty-four races or subspecies have become extinct. Ninety-four separate species of birds have also been obliterated, along with 164 different races. In addition to the approximately 350 identified species and subspecies of birds or mammals that are known to have disappeared, numerous other life forms have perished but gone unrecorded.

One of the best-known of all extinct species is the great auk, a large, flightless bird that was found on the rocky islands of the North Atlantic Ocean. Jacques Carder, the first man to land on its breeding grounds in 1534, quickly slaughtered enough of these helpless, unresisting birds to fill two boats. Subsequent expeditions killed enormous numbers of these birds for food and oil, and as the species became rare museum collectors and scientists rushed in to obtain specimens and eggs before they were all gone. Carl Siemson, a collector's agent from Reykjavik, Iceland, offered a sizeable reward for skins of remaining birds. As a result, the last two auks known to have existed were killed on Eldey Island, off Iceland, in 1844 by an Icelandic fisherman, Vilhjalmur Hakonarsson, who collected 100 crowns for the world's last members of this species.

At least two species of marine mammals have recently become extinct, Steller's sea cow and the sea mink. Steller's sea cow (*Hydrodamalis stelleri*), also called the giant sea cow, was first discovered in 1741 by a German naturalist Georg Wilhelm Steller on the Aleutian Islands, off the coast of Alaska. This giant mammal attained a length of 30ft and weighed as much as 4 tons. In the 1700s whale, seal and sea otter hunters begin to kill the sea cows in large numbers for their meat, an easy task since these slow-moving creatures were virtually helpless and unable to defend themselves, and appeared to have little fear of humans. They seemed to be highly intelligent and affectionate towards one another. In his journals Steller described the sea cow as showing 'signs of a wonderful intelligence, indeed, an uncommon love for one another, which extended so far that when one of them was hooked, all the others were intent upon saving it'. The sea cows would surround and circle the one being killed or would jostle the attacking boat. One male spent two days swimming into shore near its mate, which was lying dead on the beach. By 1768, only twenty-seven years after the first human sighted this remarkable species, it had been completely obliterated.

The sea mink (*Mustela vison macrodon*) has also been extinct since about 1880. Formerly found along the coast and islands of Maine, it was hunted for its fur until none remained.

The Caribbean monk seal (*Monachus tropicalis*), or West Indian seal, also appears to be extinct, as no sightings of it have been reported for several years. A contributing factor in its decline was its friendliness and seeming affection for people, which greatly facilitated its killing. This seal once occurred throughout the Caribbean and the Gulf of Mexico. It may have been the first New World animal to be recorded, and Columbus' crew killed eight of them for food on his second voyage in 1494. The Caribbean monk seal was intensively hunted in the 1600s and 1700s, and by 1850 it was almost gone. It continued to be shot and clubbed by fishermen, and in 1911 a group of Mexican fishermen wiped out what may have been the last large herd of these seals off the coast of Yucatan. The last reported sighting of a monk seal thought to be valid occurred in 1962; although there have been rumours of seals seen off British Honduras and the Caribbean coast of Mexico, intensive searches of possible habitats have failed to turn up even a trace. (The other two species of monk seals, the Mediterranean (*Monachus monachus*) and the Hawaiian (*Monachus schauinlandis*) are seriously endangered, with the latter numbering only a few hundred.)

The status of many other animals is unknown; several of these too may be extinct. The unique dog-like marsupial, the Thylacine or Tasmanian wolf, which carries its young in a pouch, has not been seen for two decades, although it is thought that one or two lonely pairs may exist on the Australian island state of Tasmania. The mysterious laughing owl of New Zealand, which makes its presence known through hoots, barks and shrieks, has not been seen or heard since 1900.

Bringing Civilization - and Carnage - to the New World

The 'discovery' of America by 'civilized' Europeans also doomed much of its wildlife. When the American colonists arrived in South Carolina they found a land, as one of them wrote in 1709, filled with 'endless Numbers of Panthers, Tigers, Wolves and other Beasts of Prey' that filled the night with 'the dismall'st and most hideous Noise'. But the settlers wasted little time in wiping out the native wildlife, including elk, buffalo, deer and wild pigeons 'in flocks so dense they blotted out the sun'. The 'great flocks of parakeets' that filled the air were completely extirpated, and the Carolina parakeet is now extinct. And even the prolific deer were eliminated, with over 64,000 deerskins being shipped to England by the Carolina Colony in 1699 alone. (The deer found today in South Carolina were transplanted from elsewhere to provide targets for hunters.)

In the North and West fur traders moved across the country wiping out the beavers in their path until very few were left in most areas. And in the South the beautiful and stately egrets, great white herons and roseate spoonbills were mercilessly slaughtered for their feathers, which were shipped to New York and used for plumage by the women's fashion industry. Fortunately, laws were passed in time to save these birds, and today remnant flocks of them still survive.

One of the most remarkable feats of the early American settlers was the wiping out of the passenger pigeon, among the most prolific species in North America and one of the most plentiful bird species the world has ever known. Accounts by naturalist John James Audubon in the early 1800s describe seemingly endless flocks of these birds blackening the sky for days at a time as they passed overhead, only to be shot down by the thousands (many by Audubon himself). In the 1860s and 1870s tens of millions of these birds were slaughtered annually. This massive hunting, combined with the destruction of nesting areas, led to the demise of the bird; the last passenger pigeon left in the world died in the Cincinnati Zoo in 1914.

It soon became apparent that no animal, no matter how powerful or abundant, was safe from the White Man's destructiveness. The 'winning of the West' involved the destruction of the buffalo, which was so abundant as to be considered virtually inexhaustible (as many animals are today). The buffalo was one of the most populous mammals ever to exist - one herd seen in 1870 in Arkansas was described as stretching 'from six to ten miles in almost every direction'. In the Far West the herds were even larger and stretched for as far as the eye could see. In 1871 a cavalry troop rode for six days through a herd of buffalo, but fifteen years later a survey counted only 541 in the entire West. In a few years the buffalo population had been reduced from an estimated 60 million to a low of about 22 individuals according to some estimates. Often white hunters would shoot them for the 'fun' or 'sport' of it, and leave the carcasses behind to rot. Moreover, US government policy encouraged the destruction of the buffalo herds so as to deny the Indians an important source of food and hides. Inevitably, the extirpation of the buffalo helped to eliminate other animals dependent upon it for food, such as the plains wolf and, eventually, the Indians.

The pioneers who settled the West also succeeded in wiping out sixteen separate races of grizzly bear (in the traditional taxonomy), six of wolves, one fox and one cougar. Since the Puritans landed at Plymouth Rock in 1620 over 500 types of native American animals and plants have disappeared from the United States.

The Waiting List For Extinction

Today many animals stand on the very abyss of oblivion. Most species of our biological cousins, the primates, are threatened to some degree, including our closest living relatives, the Great Apes: chimpanzees, gorillas, and orang-utans. No more than 240 mountain gorillas are thought to survive in the wild, facing a constant threat from poachers, 'collectors' and habitat-destroying humans who continue to encroach on their last refuges in the mountain rain forests of Rwanda, Uganda and Zaire. The wild population of California condors were down to about seventeen, as of mid-1984. And in 1983 only five dusky seaside sparrows could be found in their only known habitat, a National Wildlife Refuge in Florida; unfortunately, they were all males.

As David Day observes in his 1981 book *The Doomsday Book of Animals*, many species classified as endangered are 'merely [on] a waiting list for extinction'. He reports: 'It is estimated that there are today one Abingdon Galapagos tortoise, two Kauai O-O honey-eaters, five Mauritian ring-necked parakeets, five Javan tigers, six Mauritian kestrels, twelve Chatham Island robins, eighteen Mauritian pink pigeons, about fifty Javan rhinoceroses.' Obviously, by the time a species is reduced to such a precarious level recovery is difficult, if not impossible, to achieve. Yet many species of once-abundant wildlife continue to be subjected to slaughter so massive as to threaten their survival.

Despite worldwide campaigns waged for over a decade to save the whales, their commercial slaughter continues apace, albeit at a much reduced rate. For almost as long as humans have known about whales, they have hunted them. One of the first to organize commercial whaling expeditions was King Alfred of England in about AD 890. In the eleventh century the Basques were hunting North Atlantic right whales in the Bay of Biscay and, by the fifteenth century, had nearly wiped out this population stock. Beginning in the 1600s whalers took about a hundred years to decimate the whale population of the Arctic, and the Greenland right whale was reduced to the verge of extinction. In the late 1700s whalers successively moved through the Pacific, Indian, and Atlantic oceans, destroying these whale populations by the 1920s. By this time the oceans of the northern hemisphere contained so few whales that most of the hunting shifted to the southern hemisphere, where the Antarctic Ocean made up for the whale shortage elsewhere.

The history of whaling in the recent decades up to the 1970s records the exploitation of the most valuable species until they have become virtually extinct; then they have been declared 'protected', and whalers have moved on to the next largest species until they too have disappeared. In the last fifty years more than 2 million whales have been killed, with a record 67,000 'taken' in 1962. The quota for the 1973-74 season was 37,500; current annual quotas have fortunately been reduced to between 10,000 and 12,000. The quota for the 1984-85 season has been set at about 6,800. In 1982 the International Whaling Commission (IWC) voted a general moratorium on commercial whaling to begin in the 1985-86 whaling season. But the major whaling nations, including Japan, the Soviet Union and Norway, have formally objected to the measure, so it remains to be seen whether or not it will be implemented.

As a result of this carnage at least one species of whale, the Atlantic grey (*Eschrichtius gibosus*), once found in the North Atlantic, has been totally wiped out. Several other species, such as the bowhead and the humpback, are seriously endangered, as both are still being reduced by aboriginal hunting.

One of the most gravely threatened of the Great Whales is also the most spectacular: the mighty blue whale (*Balaenoptera musculus*), the largest creature ever to inhabit the earth and, judging by the size and convolutions of its huge brain, certainly one of the most intelligent. Its newborn calf can weigh more than an adult elephant and nurses for seven months, taking in up to 1,000lb of milk a day! Writer John Barbour has described this leviathan:

Nothing on earth has ever matched its size. It is larger than 30 elephants; larger than the combined size of three of the largest dinosaurs that ever lived. It weighs more than 2,000 people, a small town. Its heart weighs 1,200lbs, its liver a ton, its tongue more than one-third of a ton.

The precarious state to which these mammals have been reduced can clearly be seen in the catch figures for the Antarctic in recent decades, as compiled by the IWC. In the 1930-31 winter whaling season almost 30,000 blue whales were taken. By 1945-46 fewer than 10,000 were caught, and the catch in the late 1950s averaged fewer than 1,500 a year. In 1962-63, for the first time, fewer than 1,000 blue whales were available for 'harvesting': only 944 could be found and killed. The stocks of blue whales were now clearly on the verge of collapse, but the slaughter continued. The following year, 1963-64, the take dropped to 112 blue whales, and by 1964-65 only twenty could be found and killed by the whalers.

Finally, in 1965, when the whaling industry (primarily Japan, the Soviet Union and Norway) was unable to locate enough blue whales for which to set quotas, the IWC declared the Antarctic stocks to be 'protected', and a nominal 'ban' on their killing was announced. By this time over 325,000 blue whales had been killed since the turn of the century. In December 1970, when the US Department of the Interior placed the blue whale on its list of endangered species, it estimated that only between 600 and 3,000 remained worldwide. More recently, purported sightings by Japanese whalers have pushed some estimates as high as 10,000-20,000, but these appear to be grossly inflated.

Even if the illegal and unreported killing of blue whales were to be completely halted, there is serious doubt about whether enough males and females, scattered throughout the vast expanse of the world's oceans, will be able to find each other and breed in sufficient numbers to perpetuate the species.

Other whales, such as the humpback, bowhead, right, fin, sei and sperm, have similarly been severely depleted by commercial whaling (and, in the case of the bowhead, also by continued hunting by Alaskan Eskimos). All of these whales, along with the blue and California grey, are listed by the US Government as endangered species. The fate of the whales may depend on whether or not the whaling nations agree to accept the general moratorium on commercial

whaling voted by the IWC.

The Massive Extinction of 'Lower' Life Forms

The remorseless and well-documented annihilation of 'higher' life forms, cruel, senseless and destructive as it is, pales by comparison with the much vaster yet less well-known, extirpation of the more obscure species, such as plants, molluscs and crustaceans. As the rate of extinction of these life forms accelerates, we are beginning to learn that many creatures which may now seem most 'expendable' | may turn out to be fundamental to the well-being and survival of many other species, including humans.

As pointed out in the 1978 report published by the President's Council on Environmental Quality (CEQ), *The Global Environment :1 and Basic Human Needs:*

the total number of plant and animal species on earth may be as high as 10 million – only about 15 per cent of which have been identified in scientific literature, let alone been well studied. If current trends continue, a good share of the unrecorded majority of species will vanish for ever before their existence, or their biological importance, is known.

Over the next decade or two, warns CEQ, 'unique ecosystems populated by thousands of unrecorded plant and animal species face rapid destruction - irreversible genetic losses that will profoundly alter the course of evolution.'

Because of the ever-increasing exploitation and destruction of the tropical rain forests, most of the forthcoming extinctions of foreign plants will occur in these regions. Rain forests receive extraordinary amounts of warmth, moisture and sunlight and thus provide an ideal habitat for an amazing variety of species. The Amazon Basin, probably the richest biological community on earth, alone may house 1 million species (in addition to various unique and endangered tribes of Indians that are also threatened there). More types of woody plant species are found on the slopes of a single Philippine volcano than in the entire United States.

In the last thirty years half of the world's rain forests have been destroyed, and the remainder are being cut at a rate of between 27 and 50 million acres a year – one or two acres a second! Worldwide there are thought to be at least 5 million species of plants and animals (many of which are yet to be 'discovered' by man) that inhabit tropical forests, are dependent on them for survival and are found nowhere else in the world. At the present rate of deforestation, experts fear that at least several hundred thousand such species are candidates for extinction over the next two decades. The destruction of the rain forests is dooming not only such creatures as orang-utans and other primates, jaguars, parrots and various crocodilians but also numerous lesser-known life forms. In his book *The Sinking Ark* wildlife specialist Norman Myers estimates that at least one species *a day* is already being wiped out in the tropical forests and that given the increasing rate of timber exploitation, one species *an hour* may soon be lost in the years ahead.

The Loss to Humanity

These losses will deprive the world not only of countless beautiful and diverse life forms, but also of future sources of food, drugs and medicines of incalculable value.

The United Nations Environment Programme in its *World Conservation Strategy* report of March 1980, describing the immense potential value of these plants.

Penicillin, digitalis, quinine, rubber, pectin, resins, gums, insecticides - these and other medicines and products come from plants. One out of two prescriptions filled in the US each day is for a drug based on an ingredient in a plant. . . . The wheat we know today began as wild plants — and some humans some unknown number of years ago may well have considered those wild plants worthless seeds.

As the 1978 CEQ report observes, the extinction of these species will also entail the loss of many useful products:

Perhaps the greatest industrial, agricultural and medical costs of species reduction will stem from future opportunities unknowingly lost. Only about 5 per cent of the world's plant species have yet been screened for pharmacologically active ingredients. Ninety per cent of the food that humans eat comes from just twelve crops, but scores of thousands of plants are edible, and some will undoubtedly prove useful in meeting human food needs.

Tropical forests are today the main source of drugs made from plants, and up to half of our prescription drugs come from such flora. In addition, these forests have been the original source of such important food items as bananas, pineapples, rice, millet, sugar cane, cassava, yams and taro. Such valuable products as rubber and quinine come from plants, and it is possible - even probable - that plants of comparable significance are being wiped out. Thus in destroying the rain forests our generation is not only wiping out numerous life forms that have the right to exist but is also depriving itself and future generations of plants that could provide cures for dread diseases and could become important food items for an increasingly hungry and overpopulated planet.

Other types of species of great potential value to mankind are the obscure and little-known snails, clams, scuds, and other molluscs and crustaceans, thousands of which are in serious peril because of water pollution, dredging, stream channelling, the building of highways, dams, housing developments and other destruction of habitat, carried out mainly by the Federal Government. As Dr Marc Imlay, formerly a biologist with the Interior Department's Office of Endangered Species, has pointed out:

Though they seem inconsequential in size, mussels and crustaceans are an indispensable part of the living world. Besides fitting into the food chain, these creatures have recently been recognized as being able to produce poisons, antibiotics, tranquilizers, antispasmodics, and antiseptic chemicals in their systems. Scientists believe these unique abilities can be used as models for the development of synthetic drugs.

It is not possible to quantify or predict the consequences and magnitude of these losses or the impact they will have on the earth and future generations. What is clear is that the results will be profound and could be catastrophic. As Eric Eckholm of the World-watch Institute has observed in *Disappearing Species: The Social Challenge*:

Should this biological massacre take place, evolution will no doubt continue, but in a grossly distorted manner. Such a multitude of species losses would constitute a basic and irreversible alteration in the nature of the biosphere even before we understand its workings — an evolutionary Rubicon whose crossing *Homo sapiens* would do well to avoid. . . . humans appoint themselves as the ultimate arbiters of evolution and determine its future course on the basis of short-term considerations and a great deal of ignorance. . . . Scientists cannot yet say where the critical thresholds lie, at what level of species extermination the web of life will be seriously disrupted. . . .

Eckholm further notes that when a plant species is wiped out, between ten and thirty dependent species, such as insects and even other plants, can also be jeopardized. 'Crushed by the march of civilization, one species can take many others with it, and the ecological

repercussions and rearrangements that follow may well endanger people.'

Destroying Our Fellow Creatures - and Ourselves

As human beings are part of nature, we are bound by its laws. We ignore this fact at great risk to ourselves, for eventually we will certainly destroy a species or ecosystem that is essential to our own survival. For example, whales, dolphins and porpoises, slaughtered by the tens of thousands each year, play a vital, though little understood, role in maintaining the health and stability of the world's oceans. By eliminating these intelligent cetaceans we further upset the delicate balance of life in the seas and imperil oxygen and food-producing ecosystems that are necessary for the survival of all life forms - including humans.

Every species plays some role in the environment that may be necessary for the proper functioning of the ecosystem. (For people who do not accept the concept of 'animal rights' such arguments on behalf of wildlife can be persuasive.) Even such 'ugly', dangerous and unpopular creatures as alligators and crocodiles are useful. Alligators kill and eat water moccasins and other poisonous snakes, and during times of drought-which occur periodically in the southeastern US - they dig water holes, thus providing water, food and habitat for fish, birds and the other creatures of the swamp, allowing them to survive these difficult periods. When crocodiles were eliminated from lakes and river systems in areas of Africa and Australia, many of the food fish also declined or disappeared. It is now thought that this occurred because the crocodiles had been feeding on scavenging or predatory species of fish not eaten by the natives, which, left unchecked, multiplied out of control and preyed on or crowded out many of the food fish. Thus those reptiles serve a function that is much more valuable than providing hides for shoes, wallets, belts and other fashion accessories, the demand for which has driven most of these reptile species to the verge of extinction.

If we are to save the world's wildlife, we must adopt an ethic that recognizes the right of all animals to exist, places equal value on the grotesque and the spectacular and shows as much concern for the crocodile as for the cheetah, as much for the condor as the eagle. We must realize that it is just as important to save a species of butterfly as the elephant, that the extinction of a species of mollusc is as great a tragedy as the loss of a bird or mammal. Even endangered plants should merit our concern, for not only do they have the right to live but also the well-being of a host of higher animals, including humans, may depend on their survival. As Dr George Small observes in his book *The Blue Whale*:

The tragedy of the blue whale is in the reflection of an even greater one, that of man himself. What is the nature of a species that knowingly and without good reason exterminates another? When will man learn that he is but one form of life among countless thousands, each of which is in some way related to and dependent on all others? How long will man persist in the belief that he is the master of the Earth rather than one of its guests?

Fortunately, in connection with the question of whether or not to preserve the world's wildlife the morally right consideration happens also to be the one that it is in our own selfish interest to choose. Cleveland Amory, president of the Fund for Animals, once wrote that humans have an infinite capacity to rationalize their own cruelty. But while cruelty to animals may be easy for some to accept, it is far more difficult for policy makers to defend such actions when they clearly have adverse consequences for humans. Our failure adequately to protect other species and their natural environment is already having grave consequences for much of humanity. Throughout Asia, for example, the clear-cutting of forests and the resulting flooding have caused massive loss of life, homes and farmlands. Such degradation of the environment is helping to condemn literally millions of people to lives of misery and desperation.

We have done more ecological damage to the world in the last few decades than in the entire preceding period of recorded history. If we continue at the current rate, or even at a greatly reduced level, our planet will soon be unfit for habitation by most higher life forms, including our own. In wiping out the natural heritage over which we were given dominion and stewardship responsibilities, we are engaging in nothing less than the wholesale destruction of our planet and are endangering most of the living creatures on it. As Ec-clesiastes points out so wisely: 'For that which befalleth the sons of men befalleth beasts; even one thing befalleth them: as the one dieth, so dieth the other; yea, they have all one breath; so that a man hath no pre-eminence above a beast; for all is vanity.'

There are thus many reasons to preserve threatened wildlife. Most important, animals have a right to live and fulfil their given roles as nature intended; they add beauty and diversity to the world; they are interesting to observe and study in the wild; and they have non-consumptive economic value (as with tourism and photography). But there is one more reason that should not be overlooked. In taking action to save wildlife we may well be saving ourselves, a fact that animal protection advocates should never cease to stress.

Few conservationists and animal rights advocates need to be convinced that an animal species is of value to humans to be persuaded that it should be protected from destruction. In the last decade a significant evolution in public sentiment has become apparent as increasingly large numbers of people around the world have adopted the view that animals themselves have rights wholly apart from any value they may have for humans. It has become 'respectable' - indeed, common - for people to appreciate that animals have rights and that they should not be needlessly killed or abused.

Fortunately, a significant proportion of the public has come to view in this light many highly evolved imperilled mammals, such as primates (monkeys and apes), elephants, wolves, bears, kangaroos, tigers, cheetahs and leopards and marine mammals (whales, dolphins, porpoises, seals, and sea otters). These creatures are easy to identify with, and many are seen as highly intelligent, family-oriented animals with thoughts and emotions not unlike ours, living in social groups comparable with those of humans.

Unfortunately, this strong identification with, and sympathy for, some of the 'highest' species of wildlife has not yet been adequately extended to the more obscure, less glamorous species, creatures that also have innate rights and may, ironically, be more important to us than those with complex brains, large eyes, soft fur and appealing beauty. Moreover, by stressing the legitimate right of animals to live and survive free of fear and suffering, and thereby understating the value of such creatures to the ecosystem and therefore to humans, animal rights advocates sometimes fail to raise some of the most compelling arguments in favour of wildlife preservation, ignoring points that may appeal to many otherwise unconcerned people. If our wildlife is to be saved, every valid argument must be raised in order to ensure this; pointing out a species' value to humanity (as a non-consumptive resource) in no way diminishes its intrinsic rights. Indeed, as the world becomes more and more overpopulated with humans, crowding out other creatures and destroying their habitats, human-centred arguments for wildlife and wilderness preservation may be the only ones that will be effective in some situations. Above all, we must make people aware of a single, overriding consideration; if we are to succeed in saving our planet — and ourselves - we must make it a safe world for all of the creatures of the earth. Only then will our own future be secure.