

Why should anyone care about extinctions?

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Extinction: The Causes and Consequences of the Disappearance of Species. By Paul and Anne Ehrlich. Pp.305. ISBN 0-394-51312-6. (Random House, New York: 1981.) \$15.95. To be published in the UK in April 1982 by Gollancz.

PROFESSOR Paul Ehrlich is a distinguished entomologist, known for his meticulous studies of butterfly populations. He is also known to a wider public as a leading prophet of doom. Fortunately, when he has been rash enough to fix dates for particular disasters, his prophecies have seldom been fulfilled. Thus in an article published in 1969 he forecast that "there had been the final gasp of the whaling industry in 1973 . . . by 1977 the annual yield of fish from the sea was down to 30 million tons . . . by September 1979, all important life in the sea was extinct [and] Japan and China were faced with almost instant starvation . . ." Now marine pollution has had harmful effects, but the oceans are probably as productive today as they were 12 years ago.

Yet sensible men must agree that our species is increasing in number too rapidly, and that the world's resources are being used too wastefully. The horrors foretold by Ehrlich and others are still possible unless populations are controlled and resources safeguarded. However, I believe

that exaggerated statements of imminent disaster are generally counter-productive. Instead of acting as warnings, they actually induce the complacency they are trying to prevent. They have contributed to what another author has recently described as "a waning of public enthusiasm in America for environmental issues".

In this latest book, Paul and Anne Ehrlich are still concerned with problems of global survival, but they restrict their attention to the way in which man is eliminating many species of plants and animals which coexist with him on the surface of the Earth. They avoid any more rash forecasts of dates when extinctions will occur, and even suggest that we may have 15 or so years to put our house — our globe — in order. They do, however, fear that the rate at which species disappear will accelerate, particularly in the tropics where vast areas of forest are being felled. Few scientists will disagree with their general forecasts of the extinction of species, though their views on the effects on life on Earth are less generally acceptable.

Extinctions have always taken place. There is little doubt that the vast majority of species which have evolved during the 3,000 million or so years during which life has existed on Earth are extinct. Some have suggested that we should therefore not worry about further extinctions; they believe that new organisms suited to

today's world will evolve to fill the vacant niches. Unfortunately this is unlikely, because man produces such sudden changes that there is no time for new forms to evolve. Thus the Ehrlichs point out that much as we may regret, from an aesthetic and scientific standpoint, the passing of the dinosaurs, their place has been taken by mammals and birds. If today we kill off the remaining elephants and rhinoceroses, the world's fauna will be depleted before any replacements have appeared.

As a conservationist I regret all extinctions, whether locally as of the large blue butterfly in Britain, or globally, as of the dodo, the great auk or the passenger pigeon. I wish I could help to reverse the trend. But we must accept that the majority of people do not care, and in fact are doing much to accelerate the process. How can we convince them of the error of their ways?

The Ehrlichs give four reasons. First, compassion — all species on "Spaceship Earth" have an equal right to exist. Second, aesthetic and spiritual — wildlife contributes to the beauty and interest of the world. Third, economic — many organisms, their potential as yet unrecognized, may be exploited as food or other resources, or may provide essential genetic material for crops, livestock or drugs. Fourth, and in the Ehrlichs' view most importantly, by eliminating other species man is endangering the whole global life-support system, and so rendering our planet increasingly inhospitable to man himself.

What do we mean when we say that all species have an equal right to exist? Logically this would mean that man must do nothing to decrease their numbers or to reduce the area they inhabit. Even those who, for religious reasons, do not kill, farm the land; this can cause local or even general exterminations. If it is the species which has rights, then I suspect that we like to retain some members more for our purposes than for their own.

The Ehrlichs' second reason really boils down to saying that we wish to preserve the species which give us pleasure. This pleasure may have its spiritual or even its religious components, but it acknowledges that we conserve wildlife for man's satisfaction and not for the benefit of the wild creatures themselves.

The statement about the possible economic value of wildlife has some substance. Deer and antelope are proving more efficient converters of some types of vegetation than are cattle or sheep; there may be other animals which will be profitably domesticated. Man has been very conservative in his choice of food crops, and other wild plants may be valuable sources of food. Genes of wild plants may confer valuable properties to existing crop species, so wild grasses and Andean potatoes should be preserved. Unfortunately the species of wildlife for whose preservation most effort is being



Tsintaosaurus spinorhinus, drawn from the mounted specimen in the Museum of the Institute of Vertebrate Palaeontology and Palaeoanthropology in Peking by Jenny Halstead. The illustration (the original is in colour) is taken from *Dinosaurs* by L.B. and Jenny Halstead, a book for the general reader which has recently been published by Blandford Press, price £4.95.