

The Final Empire

CHAPTER 7

EXTINCTION OF LIFE BY SPECIES INCREMENT

"Many scientists believe that a larger share of the earth's plant and animal life will disappear in our lifetime than was lost in the mass extinction that included the disappearance of the dinosaurs 65 million years ago. It is likely to be the first time in evolution's stately course that plant communities, which anchor ecosystems and maintain the habitability of the earth, will also be devastated."¹

--*State of the World 1988*--

"In its scale and compressed time span, this process of extinction will represent a greater biological debacle than anything experienced since life began."²

-*Gaia: An Atlas of Planet Management*—

The destruction of the living world, the destruction of habitat by farms and cities is the unraveling of the web of life. Because of the complex food chains and the even more complex web of services of all kinds that each living thing performs for others, the elimination of any species and especially key species, eliminates others also. Peter H. Raven, Director of the Missouri Botanical Garden, estimates that because of the specialized feeding mechanisms of most organisms feeding on plants, every plant species that goes extinct takes an average of 10-30 other species with it.³

The destruction of the life of the earth is happening so rapidly that no one knows what the cumulative effects will be. The natural human family always assumed that the earth was one living organism and now scientists with modern technology find evidence for this same assumption. (The term "natural" is used to describe the aboriginal, forager/hunter culture of the human family that has existed for 99 per cent of human history and continues to exist as remnant groups in remote parts of the world. The term natural is used because this culture existed in full integration with the natural world.) The earth is a living entity, a self-regulating organism. Each of the various species play a part in this regulation especially of the atmospheric gases that are the Gaian breathing mechanism and the collective breath of many species.⁴ As these species and their habitats such as the rainforest are wiped out there is simply no way of knowing specifically what will occur, other than the surety that the macro cycles of metabolism of the earth will go into wild fluctuation. The whole matter is so poorly understood that humans are not even sure of how many species there are on the earth. Edward O. Wilson of Harvard University says: "We do not know the true number of species on Earth even to the nearest order of magnitude."⁵

Because of the deepening planetary crisis, scientific research has focused on the question of species extinction. The current range of estimates is that we are losing one species somewhere between one per day and one per hour. By the year 2000 this may be down to one per minute or if there is a nuclear war it may become ten million in one millisecond.

Any alteration of the life of the earth that causes a decline in the Net Photosynthetic Production is an injury to the earth. That is the standard that we should focus upon. When we approach the stage of extinction of species we are near the death throes of the earth. Civilization responds, perfunctorily, to the threat of extinction of individual species, especially large mammals, but there is no basic understanding of the wiping out of whole ecosystems by airfields, agriculture, housing projects, urbanization, Agent Orange or wanton "resource extraction." There is concern about the larger life forms, many of whose remnants are saved in zoos, but there is yet little understanding that microorganisms, insects, and microscopic plant species are going also. Mammals are only one percent and vertebrates only three percent of all species. And they all are totally dependent on microorganisms. Such absurd spectacles as the "saving of the California Condor" are symptomatic of the empire culture perspective. The condor is only one organism in a web of life. It is the destruction of the web of life that has caused the condor to be on the edge of extinction. Even if the condor can be "saved" in a zoo, the habitat that the condor requires for its life will be destroyed. Empire culture has no reality base to allow it to understand that as habitat is destroyed the basic life of the earth dwindles. As habitat goes, species dwindle in numbers, vegetation lessens and topsoil disappears. The view of urbanized society is that preserving a few representative living things in parks and zoos can solve the question of species extinction. The next question, "Preserved for what?" never seems to be asked.

Even if fragments of ecosystems are called "parks" or "preserves," they are still not large enough to prevent the loss of species. State of the World 1988 reports that:

"Many parks are simply too small to maintain populations sufficient to ensure species survival. As ecological theory predicts, the smallest parks have lost the greatest share of their original mammal species, but even very large parks such as Rocky Mountain and Yosemite have lost between a quarter and a third of their native mammals."⁶

Rather than attempting to preserve a few remnant species in zoos or in small guarded habitats, we must begin restoring the earth to its former health.

The simple and hard answer is that the human population must be brought down to the level that is in balance with the Net Photosynthetic Production, the Solar Budget. The damage to the earth must be stopped and the life of the earth must be restored. There is no other way that life can continue to exist on this planet.

It is difficult for us in this era to realize how rich and abundant the life of this planet was. Our natural human family lived in a world of affluence. Skies would be dark for days with the flights of migratory birds. Barry Lopez in his book *Of Wolves and Men*, says there was a population of animals numbering 500 million on the Great Plains, with 60 million bison migrating north to south. Millions of pronghorns occupied the

plains and plateaus of the U.S. west. The salmon runs on both coasts were truly massive and supported the people for tens of thousands of years without change.

Farley Mowat, in *Sea of Slaughter*, his important work on the natural history of the North Atlantic says:

"I look out over the unquiet waters of the bay, south to the convergence of sea and sky beyond which the North Atlantic heaves against the eastern seaboard of the continent. And in my mind's eye, I see it as it was. "Pod after spouting pod of whales, the great ones together with the lesser kinds, surge through waters everywhere a-ripple with living tides of fishes. Wheeling multitudes of gannets, kittiwakes, and other such becloud the sky. The stony finger marking the end of the long beach below me is clustered with resting seals. The beach itself flickers with a restless drift of shorebirds. In the bight of the bay, whose bottom is a metropolis of clams, mussels, and lobsters, a concourse of massive heads emerges amongst floating islands of eider ducks. Scimitar tusks gleam like a lambent flame...the vision fails.

And behold the world as it is now. In all that vast expanse of sky and sea and fringing land, one gull soars in lonely flight-one drifting mote of life upon an enormous, almost empty stage."⁷

Great dangers are involved with destruction of the rainforest habitat and other remaining unsettled regions but the decimation of species also goes on in settled regions. Europe, which has hosted the industrial society the longest, is losing the final remnants of its life at an astonishing rate. In France for example, 57 per cent of the remaining- mammal species are threatened with extinction as are 58 per cent of the bird species, 39 per cent of the reptile species, 53 per cent of the amphibian species and 27 per cent of the fish species.⁸ Much of the land in Europe was drained and logged, the life system was eliminated. The auroch, the European wild ox is extinct, the last one died in 1627. The European bison exists only in a relict population and the Caucasian subspecies of bison is gone. Relict populations of ibex, chamois, bear and wolf exist but simply because a few exist has nothing to do with the reality that a huge living continental ecosystem is now gone. The large mammals are simply symbol species of the vanished habitat in which they once lived.

In Europe we see the final extrapolation of the imperial culture. We see that human beings are capable (with sufficient conditioning) of living in crowded artificial environments, breathing poisonous air and drinking equally poisonous water. The sheltering, heating and feeding of the social complex in artificial environments, is maintained by exponentially growing injections of petroleum energy to run the system and to inject into the soil in place of natural fertility. We can place our bets on whether in a few years, when the petroleum and the biological life are exhausted, the collapse of civilization results in saving some species or whether all will go as a by-product of its death throes.

NOTES

1. *State of the World 1988: A Worldwatch Institute Report on Progress Toward a Sustainable Society*. Lester Brown, et. Al. W.W. Norton & Co. New York. 1988. P. 102.
2. *Gaia: An Atlas of Planet Management*. Norman Myers, Editor. Anchor Books. Garden City, NY. 1984. P. 154.
3. *Extinction: The Causes and Consequences of the Disappearance of Species*. Paul Ehrlich & Anne Ehrlich. Random House. New York. 1981. P. 139.
4. *Gaia: A New Look At Life On Earth*. J. E. Lovelock. Oxford U. Press. 1979.
5. *State of the World: 1988*. op. cit. p. 104.
6. *State of the World: 1988*. op. cit. p. 104.
7. *Sea of Slaughter*. Farley Mowat. Bantam Books. New York. 1986. P. 404.
8. *World Resources 1987: An Assessment of the Resource Base that Supports the Global Economy*. A Report by the International Institute for Environment and Development and the World Resources Institute. Basic Books Inc. New York. 1987. P. 295.