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The Last Lap to Extinction

The Indian Wildlife (Protection) Act, promulgated in 1972, listed 41 mammals on its Schedule I of completely protected species. Twenty-seven years later, the Schedule covers 66 species of mammals. Other groups such as birds, reptiles, amphibians, fishes and insects (butterflies) are in an equally precarious situation. Whether there will be any species which is not on the endangered list or extinct in the first few years of the next millennium is a cause for serious concern.

Among endangered species, those with only a single existing population, namely the Kashmir Stag *Cervus elaphus hanglu*, the Thamin or Brow-antlered Deer *Cervus eldi eldi*, the peninsular race of the Swamp Deer *Cervus duvauceli branderi* and the Asiatic Lion *Panthera leo persica* are possible candidates for early extinction. The protected areas are the key to their survival. Unfortunately, though numerous, they are small in size and under considerable pressure from ever increasing human needs. The riverain forests and grasslands are an illustrative example. This habitat, which extended along the foot of the Himalayas and along the course of the rivers that emerge from them, is the most suitable for conversion into wetlands for the cultivation of crops. The loss of this habitat to human needs can be judged from a comparison of the past and present distribution of the Indian Rhinoceros *Rhinoceros unicornis*. It once inhabited the Indogangetic Plain as far west as Peshawar in what is now Pakistan, where the Moghul Emperor Babur hunted it 400 years ago. Besides the rhinoceros, four other endangered species are typical of this habitat, namely the Swamp Deer, Wild Water Buffalo, Pigmy Hog and Hispid Hare. One bird species, the Pink-headed Duck *Rhodonessa caryophyllacea*, which favoured this habitat is now extinct. Long term studies on the ecology of such endangered habitats, require urgent consideration. Unless these areas are sustained, and rehabilitated where degradation has set in, wildlife conservation in India is a lost cause.

Populations of endangered species occupying a specialized habitat, particularly where there is no possibility of increasing the area of such habitats, require urgent attention. Capture and translocation are the methods of choice if a similar habitat is available elsewhere within the country or in other nearby countries with similar climatic regimes. Species such as the Blackbuck have reached this point.

An area of serious concern is the fragmentation of habitats. Populations of animals such as the Wild Water Buffalo *Bubalus bubalis*, Gaur *Bos gaurus*, Elephant *Elephas maximus* and Tiger *Panthera tigris* have become isolated from one another. More species will develop isolated populations as corridors of contact are lost. Such genetic isolation needs careful evaluation.

The increasing human population has resulted in an increasing human presence in Indian Wildlife habitats, to the extent that there is hardly any forest area in India which is truly free of human intrusion. Those species which show a low tolerance for such intrusion have the least chance for survival.



J.C. DANIEL



E.P. GEE



The Hangul Deer *Cervus elaphus hanglu*

LT. GEN. R.K. GAUR