

BIO-DIVERSITY

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The Japanese Crested Ibis (*Nipponia nippon*) is a beautiful bird with a scarlet head and a body covered with white feathers. It could be seen everywhere in Japan until the 19th century. There was a significant decrease in population after 1900 until 1975, when only a few birds were observed. Hunting, degradation of the natural environment of its habitat and reduction of food of the birds in fields due to the introduction of pesticides, might be the causes of their rapid decline.

By the time it was discovered that the bird was threatened with extinction it was too late. The Environmental Agency captured the birds in 1981, and tried an artificial propagation without success until 1990.

When the number of animals decreases to a certain point, a sound offspring cannot be raised by intermarriage. This is an indication of the difficulty of keeping gene diversity. One should take special care to maintain bio-diversity.

In the case of the Japanese crane (*Grus Japonensis*), however, man was successful in feeding a group of birds, then the cranes found a suitable place to build their nests near the feeding sites in the National Park. For some years the number of the birds has been increasing and in 1990 it reached about 500 which may be the stabilized population in that habitat. Cranes are lovingly protected because people believe that the crane symbolizes longevity in Japan. Cranes will remain if the environment is kept unchanged.

There are many wild animals which have become extinct. Plants are more easily devastated since they cannot escape by moving from the risky and unpleasant places. (Fig. 1)

Countless animal, plant, and microbial species are in danger of possible extinction. Although popular attention has focused on the risk of extinction of more visible and widely known species, the whooping crane and the white rhinoceros, for example, the loss of less obvious living things could be much more devastating.

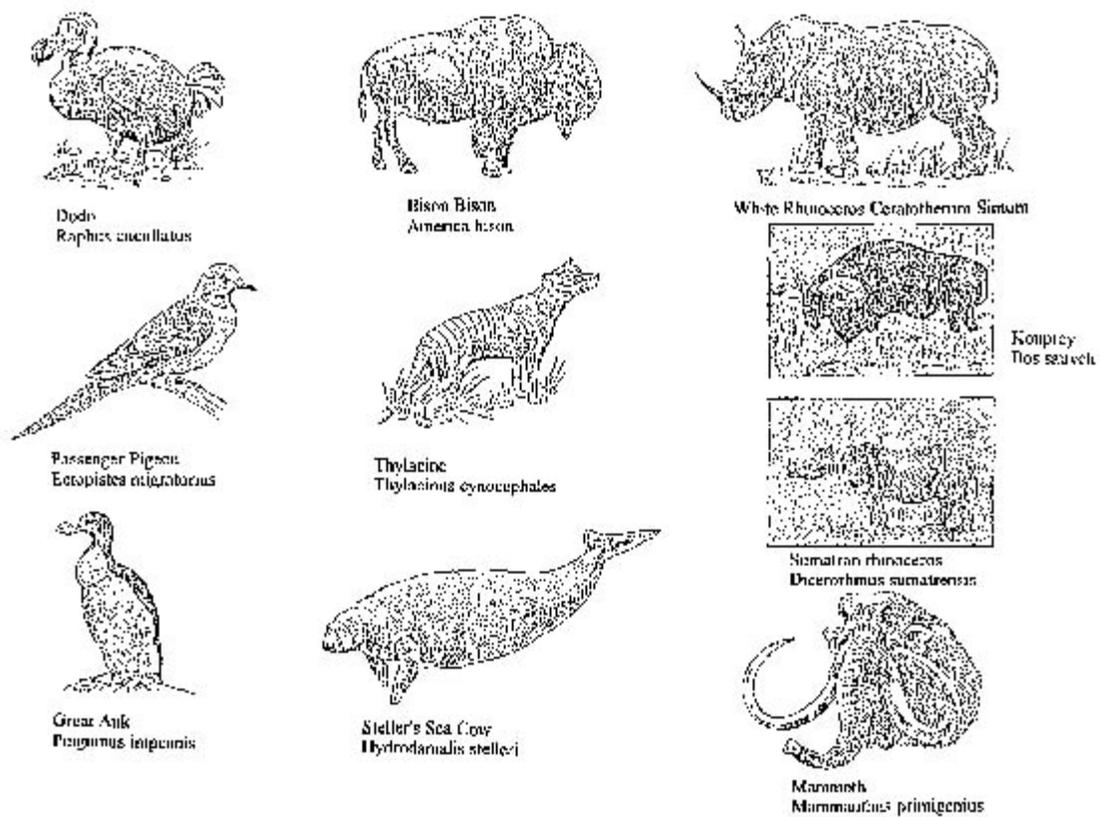


Figure 1: Extinct animals

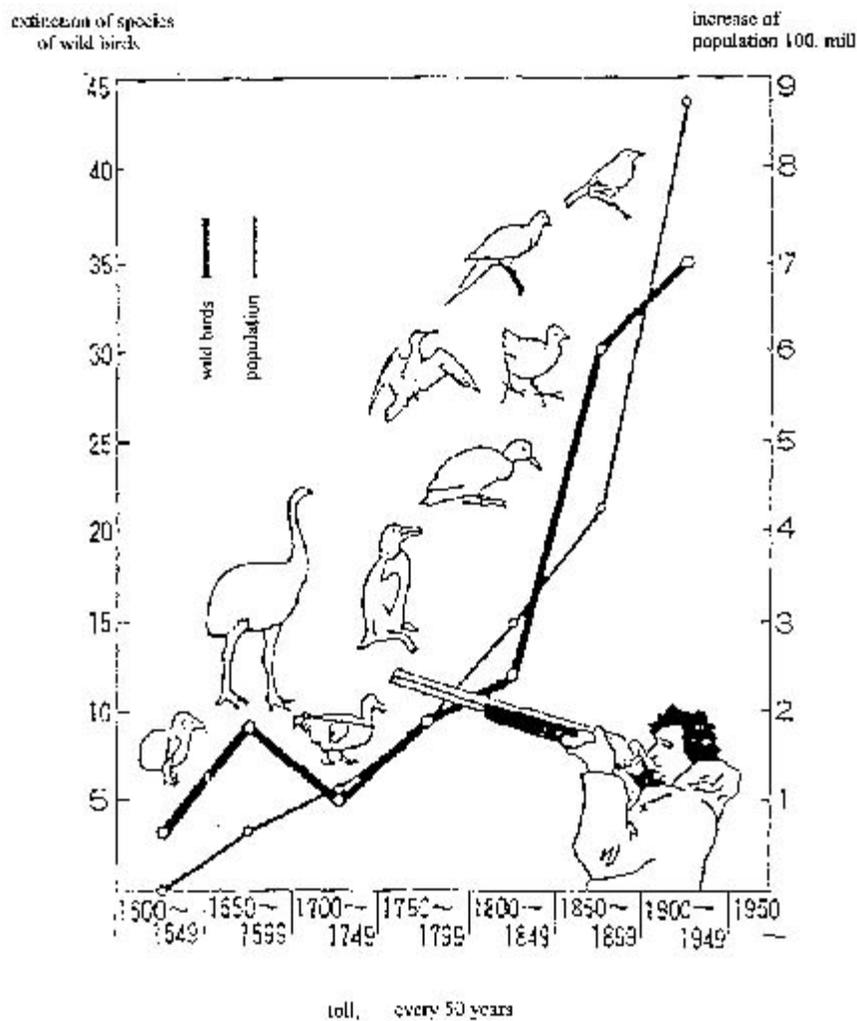


Figure 2: The relation between the extinction of species of wild birds and the increase of population

Humanity has improved agriculture and stock farming on the basis of bio-logy. However by the recent advances in bio-technology, new technology, like the recombinant DNA, is extensively utilized, even in the pharmaceutical industry. The building of a gene bank is being planned in several countries. Experts, therefore, recognize the importance of keeping bio-diversity. The biosphere is a system consisting of numerous living species, which do not exist on the earth simply to be used by human beings. We recognize the biosphere as an important element of the global environment. Should the diversity of the biosphere be lost, and the environment itself changed, the consequences might then be unfavorable for human beings.

The figure indicates that the extinction of wild birds and the increase of the human population are closely related. It does not necessarily mean that birds are killed only by hunting. Other factors such as the loss of suitable nesting places by human invasion and reduction of food by the expansion of cultivated land may also cause the reduction of bird population. (Fig. 2)

A Buddhist monk encountered a tiger in a mountain where he was pursuing his training in Buddhism. The tiger was starving to death. The monk threw himself to feed the tiger. The tiger could survive with the sacrifice of the monk's life. The name of the monk is not recorded in the Buddhist scriptures. It is not known whether the fable is a fiction or a true story.

It is rather difficult to understand the meaning of this allegory. In oriental philosophy, humans do not assume the position of the center of ecosystems. Coexistence with nature is an ideal style of living in the Far East.

In conclusion, we should ask ourselves what the meaning of the protection of bio-diversity really is.

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