

ESPECES MENACEES OU EN VOIE DE DISPARITION.
VANISHING SPECIES.

THE GREAT INDIAN ONE-HORNED RHINOCEROS
(*Rhinoceros unicornis* LINN.)
IN ASSAM PROVINCE, INDIA,

BY

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At the invitation of the Government of Assam, the Bombay Natural History Society deputed a two-man commission consisting of Mr. Salim Ali, its Honorary Secretary, and Dr. S. Dillon Ripley of Yale University (U.S.A.) to report on some of the Wildlife sanctuaries in that Province and make recommendations for their improvement both from the point of view of practical conservation and public education.

Particular interest attaches to the Assam sanctuaries since they are at the present time some of the very last refuges of the Great One-horned Rhinoceros (*Rhinoceros unicornis* L.).

The following are some excerpts from the findings and recommendations of this Commission which bear on some of the questions to be discussed at the forthcoming UNSCCUR and UNESCO IUPN Conferences.

« The Kaziranga Game Sanctuary [ca 160 square miles (410 sq. km) situated south of the Brahmaputra River in Sibsaga District] is primarily intended for the preservation of the Great One-horned Rhinoceros. The total number of individual animals noted by us during our week of inspection was about twenty-four (24). We are prepared to concede that we *may* have missed 75 % of the total number that may *possibly* exist here, without any sort of proof, of course, whether this is so or not. We cannot help feeling, however, that the figure of « 500 to 600 » given to us as the estimated population in this sanctuary is greatly in excess of actuality and apt to lead to unwarranted complacency as regards the position of the species. »

« ... we feel it essential that a proper census be made without delay, preferably enumerating males, females and young separately.

This should be followed up by periodical counts, at least once every year, since without reliable statistical and up-to-the-moment data it is impossible to gauge the vicissitudes of the rhino population or the efficacy of any measures adopted for their preservation. »

« In connection with the work of practical conservation and public education, we could recommend the penning off, by ditch or palissade, of a two- or three-acre (0,8 or 1,2 hectares) plot of typical rhino country within the sanctuary (containing suitable wallows, etc.) in which a pair or two of the animals could be kept under close observation in conditions as nearly natural as possible, for a detailed study to be made of their life history and ecology.

« It may be mentioned that extremely meagre scientific data are currently available on points of basic importance for determining the practical measures necessary for the preservation of the species. For example, we do not know precisely how long the rhino takes to attain maturity, to what age it lives, at what age it begins to breed, what is the period of gestation or between one calf and the next, sex ratios and sex relations, social behaviour, to what enemies or diseases it is particularly susceptible, the causes of fluctuation in its numbers, seasonal movements and migrations, straying, and so on... It should be possible to collect most of the relevant data by an intensive study of the animals in their wild state supplemented and checked by information obtained under such controlled conditions. »

« One of the problems of primary importance in the practical conservation of the rhinoceros in the Kaziranga Sanctuary is in connection with the grazing of village cattle which is now permitted within the northern and southern boundaries of the area. We are emphatic that it is absolutely imperative to stop this grazing completely and *without delay*. It is realized that steps in this direction are bound to meet with considerable opposition from a section of the people. However, if it is the serious intention of Government to safeguard the continued existence of this fast-vanishing species (so ruthlessly persecuted in the past for its commercial possibilities) no half measures will work, and Government *must* be prepared to face a certain amount of ephemeral unpopularity. Such unpopularity will be more than counter-balanced by the gratitude they will earn from posterity, and by the general approbation and moral support they will receive not only from all right-thinking people in this country but from international scientific bodies such as Unesco who are watching the position with keen interest and deep concern.

« That anthrax and similar diseases are readily contracted by wild animals from infected village cattle with wholesale tragic results is only too well known. Thus, domestic cattle were undoubtedly responsible for the anthrax epidemic of 1947 which

destroyed an ascertained total of fourteen rhinoceros in Kaziranga Sanctuary and probably accounted for many more whose carcasses remained undetected.

» Our maximum estimate of the One-horned Rhinoceros in Assam is two hundred (200). Our minimum estimate is fifty-three (53), as follows: Kaziranga Sanctuary twenty-four (24), Manas Sanctuary (North Kamrup District) two (2), Sonairupai Sanctuary (Darrang District) one (1), Orang Sanctuary (Darrang District) eight (8), Laokow forest (Nowgong District) eighteen (18).

A complete ecological survey of the status of the rhinoceros in Assam should be undertaken. The present estimates of the number of these animals in the Province range from two hundred — our maximum — to five hundred-one thousand (500,100) — others' maximum. Even if there are actually as many as two hundred (200) of these animals left, this figure is more than the combined total from all other known habitats at present, namely: Nepal (estimated) fifty (50), Bengal (estimated) twenty-five (25), Cooch Behar (estimated) twenty (20): total ninety-five (95).

» Thus the inescapable responsibility of preserving the species from extinction falls upon Assam. »

« The Annual Report of the working of the Wildlife Division of the Assam Forest Department should be forwarded through the proper channels to the Government of India in New Delhi with the request that it be passed on to the International Committee for Wildlife Protection (now connected with Unesco) for circulation to other nations. »

NOTES ON BIRDS THREATENED WITH EXTINCTION.

BY

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Africa. — Dr. Chapin believes that some of the game birds, such as the bustards and guinea hens, should receive the benefit of a closed season in all parts of Africa where there are appreciable numbers of white hunters. At least one species of guinea fowl (*Agelastes meleagrides*) of Liberia has not been recorded in many years.

India. — Several species of Indian bustards require better protection. For example, the Great Indian Bustard (*Choriotis magna*) is one of them. The peculiar Pink-headed Duck (*Rhodanessa*) is another very rare species that deserves study and protection.

Australia. — Several Australian parrots are on the verge of extinction. Among the rarest are the Beautiful Parakeet (*Psephotus pulcherrimus*) and the Ground Parakeet (*Pezoporus wallicus*).

Oceania. — The kagou (*Rhinochetus jubatus*) of New Caledonia is a very unusual bird in great need of further protection, as pointed out by Dr. Dwain Warner in a recent issue of THE AUK. In the Marianas Islands the native mallard (*Anas oustaletii*) is also threatened with extinction. In the Hawaiian Islands the same is true of the native Hawaiian goose (*Nesochen*) and the Hawaiian duck (*Anas wyvilliana*).

Judging from Oliver Austin's recent papers, the Short-tailed Albatross may already be extinct.

North and South America. — The species threatened with extinction in North America have already received considerable publicity, and strenuous efforts are under way to save some of them, such as the Whooping Crane. In South America the Brazilian merganser (*Mergus octosetaceus*) has always been rare, though its exact status is uncertain.

THREATENED AND VANISHING SPECIES OF FLORA AND FAUNA IN INDONESIA,

BY

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SUMMARY.

Mr. Appelman points out that the extinction of plants and animals is generally caused by the following factors:

- 1) Vanishing of their biotopes as a result of the ever-increasing human population;
- 2) The trade in living wild plants, wild animals, their skins, horns, and aphrodisiacs prepared from them;
- 3) Unbridled hunting, for lack of adequate hunting regulations through not — or improperly — putting those measures into effect.

These factors occur in Indonesia partly as a result of the unstable political situation, but this is no reflection on tropical countries, since in « inadequately governed European countries the situation is, or would be, the same ».

Although it is very difficult to determine which species are most threatened in the Malayan Archipelago, the author lists and