

## FOUR. RARE INDIAN ANIMALS

By E. P. GEE

Until 1952 there was no agency in India directly concerned with the preservation of the country's wild life, and the Forest Departments of the various States were only able to extend a limited measure of protection within certain of the reserved forests under their jurisdiction.

At the end of 1952 the constitution of the Indian Board for Wild Life, consisting of non-officials as well as of officials, to advise the Central Government in New Delhi, was an important step forward in nature conservation in India. It was followed within a very short time by the constitution of State Wild Life Boards in nearly all the States of the Indian Union. By now several States also possess separate Wild Life Departments, within the Forest Department, concerned solely with the preservation of wild life.

The creation of these Boards at Centre and State levels has not been followed by any remarkable results, nor has there been any marked improvement in the general position of wild life over the whole country. But it can safely be said that the publicity given by them in the Press and elsewhere has succeeded in focusing public attention on the need to protect the country's rare and vanishing species and on the desirability of maintaining and developing the wild life reserves. As a result, the status to-day of the Indian rhinoceros, Indian lion, brown-antlered deer and Kashmir stag is more secure than it has ever been since the lowest recorded levels of these species.

### THE GREAT INDIAN ONE-HORNED RHINOCEROS

Due to continuous killing for its horn (highly valued in eastern Asia as an aphrodisiac) the population of the Indian rhino probably fell to its lowest level in Bengal and Assam about the year 1904. In that year, for example, there were estimated to be only about twelve rhino left in the 166 square mile area which is now known as Kaziranga. In 1908 Kaziranga was officially constituted a forest reserve, and in 1926 a game sanctuary. By 1930 the number of rhino there had probably increased to about 150, but in the early thirties another wave of intense poaching destroyed many animals. Poaching was brought under control by 1935, and from that time the rhino in this reserve have steadily increased to the present estimated total of 250, making Kaziranga the main rhinoceros stronghold in India.

The rhino in other parts of Assam and Bengal have also increased, so that a conservative estimate of the number of this species in India to-day is as follows:—

ASSAM : Kaziranga 250, Manas 45, Laokhowa 25, Orang 15, Sonarupa 5, elsewhere 10. Total	. 350
BENGAL : Jaldapara 40, elsewhere 8. Total	. 48
BIHAR : stragglers from Nepal 2. Total	. 2
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Total in India	. 400
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This gratifying increase in the number of rhino is mainly due to the following measures: the Bengal Rhinoceros Preservation Act of 1931; the Assam Rhinoceros Preservation Act of 1953; the improved administration of Kaziranga since 1952, and the creation round Kaziranga in 1953 of a buffer zone closed to shooting. As a result of improved administration and of continued publicity in the Press and radio, the danger of the rhinoceros being killed off for its horn or for its meat has diminished. To-day the greatest danger, and the most difficult problem, is that of pressure from cultivators and graziers—especially the latter. Lands in the vicinity of the rhino reserves, which formerly were unoccupied waste, have been opened up in recent years, and the herds of cattle and domestic buffaloes are a direct threat to the sanctity of the reserve boundaries. In fact a portion of Kaziranga has actually been allowed to be opened for grazing by domestic animals, which is not only a serious infringement but brings in the risk of disease.

Nepal, a neighbouring country to India, has long been noted for its possession of typical rhino habitat and a number of these animals. But it has always proved difficult to obtain accurate information on the rhino population of that country. For some years it has been given by the writer as fifty, and more recently as 100. The estimate of 1,000 given in 1953 by the Forest Department of Nepal has never been accepted.

In 1957 Mr. P. D. Stracey, Director of Forest Education, India, was able to visit the famous Chitawan area in the Rapti Valley of Nepal, which for many years had been the shooting preserve of the kings and prime ministers of that country. He found that the extent of the rhino habitat there was as much as 500 square miles, and estimated the number of rhino to be about 400, the same number as in the whole of India.

The survival of these rhino in Nepal is threatened by schemes for settlement of cultivators, and by an increase of poaching since the introduction of democratic government, as contrasted with the strict protection given by the former rulers of Nepal.

In spite of the Nepal Forest Department's anti-poaching measures, supposed to be enforced by a special Rhino Protection Officer with a staff of 152 men, there has been a recent alarming report of large-scale poaching having taken place in the spring of 1958. An estimate of the numbers of rhino now surviving there is as low as 35, which indicates that a fresh survey of the whole situation is necessary. Unless the Nepal Government can immediately enact and enforce legislation like that of Assam and Bengal in India, and unless one or two effectively controlled sanctuaries can immediately be created, the rhino in Nepal are doomed to extinction in the very near future.

### THE INDIAN LION

Due to the increase of firearms in India during the last century, and owing to its own lack of wariness, the Indian lion almost became exterminated. Its last stronghold for many years has been the Gir Forest of 500 square miles in what was formerly Junagadh, now part of Bombay State. The lion population probably reached its lowest level about the year 1900, when there are believed to have been about 100 lions in the Gir and when a fair number were still being shot by the Nawab and his friends. The estimate of only twelve lions reported by the Junagadh Durbar at that time is now known to have been a clever propaganda move to deter important persons from attempting to obtain invitations to shoot a lion.

In 1950 a rough census of lions in the Gir, made by Mr. M. A. Wynter-Blyth, gave the lion population as 240. In 1955 another census under his supervision made the lion population 290—an increase of fifty. It is believed that this species is still on the increase.

The Executive Committee of the Indian Board for Wild Life held a meeting in the Gir Forest in 1956, and were able to obtain first-hand information on the problem of the survival of the Indian lion. As with the rhino, the main threat is from pressure of human population and domestic animals. The problem of grazing pressure is qualified by the fact that although the presence of large numbers of domestic buffaloes and cattle is an encroachment on the lions' reserve, these domestic animals provide at the same time the bulk of the lions' food supply. For in 1947-48, the departure of the Nawab and the arrival of the Indian military forces was followed by unsettled conditions, during which most of the animals, such as nilgai, sambar and chital, which formed the lions' natural food supply,

were exterminated by indiscriminate shooting. Consequently more domestic animals are now killed by the lions than previously, giving rise to the difficult problem of whether or not to pay compensation to the owners—which might become a very expensive affair.

Unlike the Indian rhino, which exists in seven or eight separate reserves in Assam and Bengal, as well as in Nepal, the Indian lion is confined to one single area. It was planned therefore to move a few lions to a new "home" within its former range and with a suitable environment. To this end a lion and two lionesses were captured in the Gir Forest and transported to Chandraprabha Sanctuary of 37 square miles in Chakia Forest in Uttar Pradesh State. Released in December, 1957, these three animals have been enjoying a natural life and are killing nilgai and sambar as well as live buffalo tied up for them. In fact the lion was recently seen rushing past a tied-up live bait in pursuit of a nilgai.

Since February, 1958, the elder of the two lionesses has been seen with a cub; and the younger lioness was then reported to be roaming about in company with the lion. In July, 1958, all four lions were reported to have left the fenced sanctuary and to be roaming further afield in the surrounding forests, and an effort is being made to coax them back into Chandraprabha.

#### THE BROW-ANTLERED DEER

Although the Manipur race, *Cervus eldi eldi* M'Clelland, of this beautiful deer, known locally as the sangai, has been receiving official protection since 1934, yet the unsettled conditions during World War II and subsequent years caused its numbers to fall to their lowest level in 1951. In fact in that year, it was actually reported by the Manipur Forest Department to be extinct. Strenuous efforts, however, by a few persons interested in nature conservation, together with a great deal of publicity, "re-discovered" this deer in 1952-53 in its reedy and marshy haunts near the Logtak Lake. In 1954 a sanctuary of 20 square miles called Keibul Lamjao was constituted for it.

Since then, as the result of strict protection, it is reported to be on the increase—though no census has been possible in such difficult terrain. A stag and hind were captured in 1956 and sent to Alipore Zoological Gardens, Calcutta, where they are thriving. Before World War II this species did well in this very same zoo.

Apart from the depredations of poachers and wild dogs, a

problem confronting the survival of this deer is that it is a great wanderer. It leaves the flooded areas near the Logtak Lake in the rains and migrates to drier places—to return to the swamps in the cold weather.

### THE KASHMIR STAG OR HANGUL

Before 1947 there were believed to exist in Kashmir about 2,000 of this deer, which resembles the red deer of Europe and the wapiti of North America. It used to be strictly protected in game preserves by the former Maharaja. But due to very disturbed political conditions and the occupation of most of Kashmir by military forces during the period 1947 to 1952, the numbers declined to their lowest level of about 325 in the whole State.

Following improved administration since 1952 the numbers of hangul have increased, and in 1957 when I visited Kashmir both in early spring and in autumn, I estimated the number to be 300 in Dachigam Sanctuary and 100 elsewhere—a total of 400. The advisability of conducting a census in the winter months, when nearly all the deer are concentrated in their restricted winter range in the valley, was impressed on the authorities; and it is gratifying to note that this has been done. During the winter of 1957–58, 325 were counted in Lower Dachigam Sanctuary, 218 elsewhere in the valley, and a few more reported in the higher snowless areas where they could not be counted. So it may safely be said that the Kashmir stag has now increased to about 550 head.

The chief obstacle to the survival of the Kashmir stag is that which endangers the Indian rhino and lion, pressure of population and grazing. There is pressure from villages and cultivation at the lower end of Lower Dachigam, the main stronghold of this deer, while Upper Dachigam is surrounded during the summer by multitudes of graziers with their flocks of cattle, sheep and goats.

The 86 square mile sanctuary is an extremely beautiful place at an altitude of about 6,500 feet. Through it flows the Harwan river between mountains 10,000 to 14,000 feet high. Similar in elevation and terrain to the North American Rocky Mountains, such a place seems designed for permanent preservation, but unfortunately the river forms the water supply of Srinagar, Kashmir's capital city, and there is a reservoir at the lower end of the sanctuary. The municipal authorities fear

that development and an influx of visitors might lead to contamination of the water. If this fear could be removed, an ideal state or national park would result.

#### CONCLUSION

It is gratifying to note that in India these four rare animals are steadily on the increase, due to an awakening of public consciousness that they are a valuable national asset. More knowledge of the ecology, life history, habits, behaviour, enemies and diseases of each species, will allow improved planning to preserve them, and to this end the Zoological Survey of India and the State Forest Departments are conducting field studies and ecological investigations.

It remains now to stabilize the habits of these species, to ensure that proper and lasting protection is accorded them and that expert management practices are followed. Yet a further step is required. Legislation is needed to upgrade the temporary sanctuaries in which these animals are found into permanent state or national parks. Only by so doing can India ensure the survival of her rhino, her lion, her brow-antlered deer and her hangul.



*Photo: E. P. Gee.*

**THE GREAT INDIAN RHINOCEROS.**



*Photo: E. P. Gee.*

**THE INDIAN LION.**



*Photo: E. P. Gee.*

**THE BROW-ANTLERED DEER.**



*Photo: E. P. Gee.*

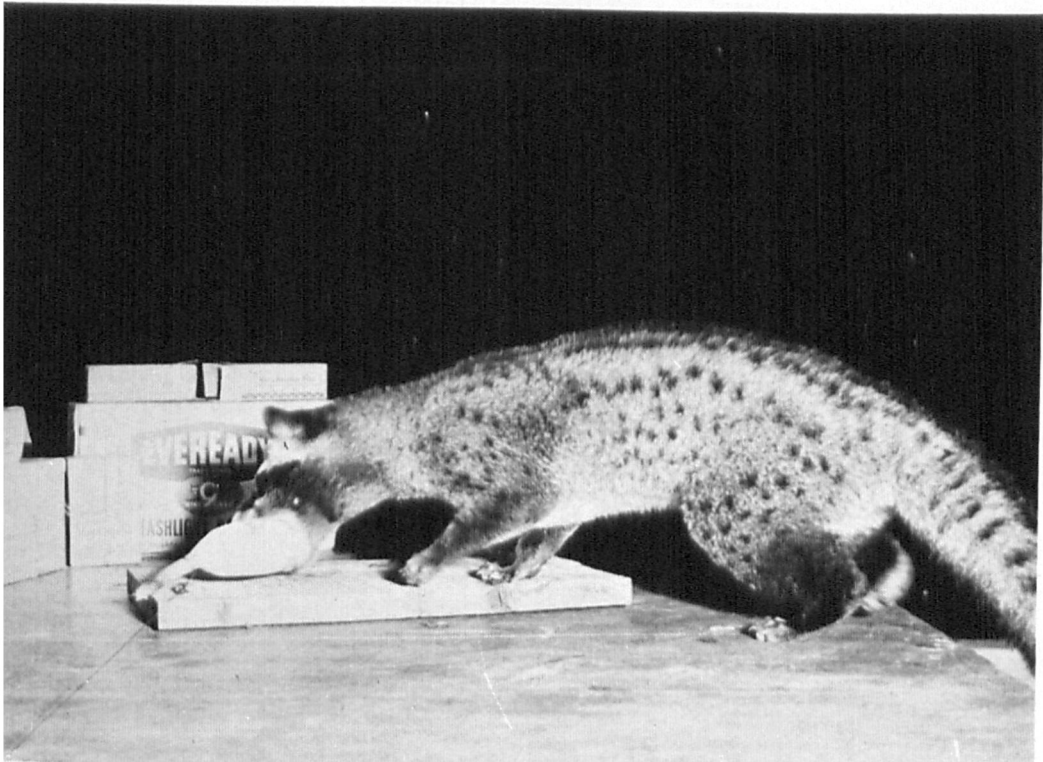
**THE KASHMIR STAG.**





**SAMBAR DEER AT INUNDATED SALT LICK. PAHANG.**

Open flash photo : H. J. Kitchener.



**A CIVET CAT STEALING A BANANA FROM A TABLE IN THE BUNGALOW OF THE SUPERINTENDENT, K.G.V. NATIONAL PARK, PAHANG.** Synchronized flash photo : H. J. Kitchener.

Baits prepared for cameras set up in the nearby jungle disappeared night after night. Camera, etc., was set up to detect the culprit which proved to be a civet cat. Trip wire can be seen at corner of plank.



*Photo: H. J. Kitchener.*

**THE EQUIPMENT FOR TAKING PICTURES OF THE SHY AND ELUSIVE  
MOUSE DEER.**



*Photo: Gorton Coombe.*

**CEYLON ELEPHANT**  
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