

# THE GREAT INDIAN RHINO

*a struggle for survival*

*By Richard Waller*



PETER JACKSON

There are five species of rhinoceros still in existence—all five are at present well exhibited in the entrance hall of the British Museum (Natural History). Two of these are found in Africa and three in Asia; of the three in Asia only the Indian one-horned rhinoceros holds out any real hope of being preserved for future generations. The other two are the Javan one-horned and the Sumatran two-horned, both of which are down to 20 to 50 individuals at the most.

The present status of the Indian rhinoceros is also that of an endangered species, and is entered as such in the Red Book of IUCN. We estimate its numbers at about 630 in all, and those are concentrated in a limited area along the base of the Himalayan foothills from the Nepalese terai in the west through the north of West Bengal into Assam in the east.

The situation in Nepal is depressing. In 1964 the estimate was 185 (E.P. Gee—*Wildlife of India*); in 1966 it was 100 or less (J. Spillet—*Bombay Natural History Society Journal*, Vol.63.3); but it was doubtful if even 70 remained when I was last in Nepal in July 1970. I was not able myself to visit this area from Katmandu due to the heavy monsoon, but the UN Wildlife Management Adviser, John Blower, who made the estimate, was in the Chitawan Rhino Sanctuary in May.

Some 50,000 to 80,000 villagers live, cultivate, and graze many thousands of cattle within the sanctuary whose rhino habitat has now been virtually destroyed, with the exception of the 150 acres around 'Tiger Tops' which has been leased to the company for 15 years by the Government of Nepal and which they protect carefully so that their foreign clients may see rhino.

However, events have been moving hopefully there during the first few months of 1971. The Government with the full backing of the King, has allocated funds for the demarcation of the Chitawan Rhino Sanctuary in the terai where, in the last few years, as stated above, thousands of cattle and domestic buffalo have been destroying the high grass habitat of the rhino. Villages will be moved, where necessary, and alternative grazing will be found for the cattle and domestic buffalo. This is an excellent step, thanks to the interest of the King of Nepal and the persistence of John Blower, UN Wildlife Adviser—and if continued with zeal, should ensure the existence of the rhino and the steady build-up of its numbers as its favourite habitat is gradually restored in the Chitawan Sanctuary.

In India, where this species of rhino is

*Two Indian rhinos in Kaziranga, Assam*



now confined to Assam and the north of West Bengal, its history over the last 65 years, in spite of various set-backs, is a triumph of wildlife conservation and efficient protection, especially in the famous Kaziranga Sanctuary in Assam. Early moves were made in the days of the British in India when, in 1906, the wife of the Chief Commissioner of Assam was most disappointed at failing to see rhino in this area after a day's search on an elephant. Reading the records of the earliest Kaziranga Reserve, her failure is not surprising as the numbers of rhino were estimated at about 40 and some put them as low as 20. The British tea planters had slaughtered nearly all of them. Luckily for the world the Chief Commissioner's wife was a forceful lady and brought such pressure to bear on her husband that he ordered the formation of the Kaziranga Reserve in 1907 and, with a fine disregard for the tea planters of his day, made the first step in saving this species of rhino from extinction.

Kaziranga went through bad times after the Second World War when poaching for rhino horn was at its height and the very people who were supposed to be protecting the rhino were in league with the poachers and shared their profits. In the early fifties there was a clean-up, followed by the excellent partnership of P.D. Stracey at the top as Chief Conservator, E.P. Gee at hand to advise, and R.C. Das running the sanctuary.

Further success has continued in the rehabilitation of the rhino since E.P. Gee in 1964 estimated 440 in India (Assam 375) and West Bengal 65). The figure for India is now about 560, of which Kaziranga has 400 and probably more, Manas 40, with about 40 in other small reserves; while West Bengal has 80, mainly in Jaldapara and a few in Gorumara.

In 1966, Spillett estimated 580 for India. The drop in the total figure since then is due to heavy poaching for rhino horn in the small, poorly protected reserves in Assam as well as outside these reserves, for which he estimated 70 and 40 respectively; of these rhino very few remain. On the other hand, numbers in the well-protected sanctuaries have risen since 1966: Jaldapara and Gorumara from 50 to 80, Manas from 15 to 40, while the Kaziranga figure remains at 400 only because a census has not been done since 1966. I believe the present number to be slightly higher. From these figures we can see clearly the effect of good administration and protection and vice versa. There is absolutely no alternative, when it comes to saving a species, but the right men determined to do a good job.

Kaziranga Sanctuary in Assam is undoubtedly the best place for viewing this species of rhino, with Jaldapara in West Bengal a good second. In view of the importance of Kaziranga both from the rhino point of view and from good tourist facilities for viewing it and other animals, I think it is worth while giving a description of the sanctuary and some of my experiences there last year.

Its area is 166 square miles, less about 15 square miles lost by erosion along the Brahmaputra river since 1950. The habitat is essentially riverine on the Brahmaputra flood plain, and it consists of four main types:

Open grassland or maidan with high grass, already partly flooded in the second half of May by early pre-monsoon rain. This is the main area for swamp and hog deer.

Tall grass and reeds (*Arundo donax* and *Phragmites* sp.) over 10 feet high. These border the following:

The many small lakes or 'bils' (the 'jheel' of the Punjab) with interconnecting streams.

Islands, usually just above flood level, covered with fairly open semi-evergreen forest (*Bombax*, *Albizia* and *Lagerstroemia* species are dominant). Annual rainfall is 80 inches.

Just as the first area, when dry or not too deeply flooded, is the favourite habitat of swamp and hog deer, with sambar largely confined to the forested islands; so the second and third areas are the ones in which rhino and wild buffalo are certain to be seen. Part of the grassland area is burnt each year in January and February and the quickly growing new shoots attract the herbivores. The annual flooding is destructive in its erosion of the northern boundary, but beneficial in so far as it appears to be the only check on the insidious water hyacinth (*Eichhornia crassipes*) which covers parts of the lakes and water courses. The flood waters also irrigate the maidans and re-stock the lakes with fish for the numerous otters and water birds.

These estimated figures of species and numbers were given me, based on a census done on the block system in March 1966:

Rhino	400
Wild buffalo	550
Elephant	375
Gaur	20
Swamp deer	250
Sambar	300
Hog deer	4,000-5,000
Barking deer	100
Wild pig	500-600
Bear (sloth & Himalayan black)	30
Tiger	20-25

Leopard  
Otter

12  
200-300

This well known sanctuary is rightly famous for its rhino and wild buffalo (*Bubalus bubalis*). The populations of both species appear to be in a healthy state with a good ratio of females to young. Considering the area of Kaziranga and the difficulty of any enlargement southwards into the Mikir Hills, it is quite possible that the present figures for these two species represent the maximum that can be carried, and they should not be allowed to increase further. A careful study is needed.

There is, of course, the ever present danger of poaching for the rhinos' horn, and killings do still occur as the poachers are professionals. They come in by night, lie up again till nightfall, and then escape sometimes kill in a previously prepared pit, lie up again till night fall, and then escape with their spoil. More regular patrols, in small groups and armed since the poachers will fight, and equipped with two-way radio sets, could almost eliminate rhino poaching. The present Divisional Officer, who has a real love and knowledge of the sanctuary, takes the poaching hazard very seriously and is personally acquainted with the eight most dangerous men. He has his own methods of obtaining information

## BRITISH wildlife calendar 1972

Ideal  
gift



september

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

HARVEST MOUSE  
*Microtus pennsylvanicus*

12  
superb

ROBERT GILLMOR drawings  
also features Deer, Badgers, Heron,  
Red Squirrels, Barn Owl, Avocet, etc.

Only 70p (includes post) from:  
Penna Press Ltd, Gombards, St Albans

LIMITED EDITION - ORDER NOW





*Young rhino and adults photographed in Kaziranga by Peter Jackson.*

and is doing a first class job.

He and I, often accompanied by his wife who is equally keen on wildlife, spent every evening of my four days there at a certain bridge over a water course in the Kaziranga block about 2½ miles into the sanctuary. From here, just before and after sunset, the wealth of this sanctuary's wildlife could be fully realised. There were never less than five rhino, either partly submerged in water or grazing on the banks, within 60 yards of us, and one evening there were eight. To one side and beyond the tall reeds, where the swamp partridges (*Francolinus gularis*) were calling, stretched the open grasslands where swamp deer stags were grazing in the late sunlight and numerous hog deer just discernible in the swaying grass.

The whistle of an otter then drew our attention to the water below and there was a pair swimming past, their heads above the water. One of them, nearing the bank, stood on his hind legs and looked at us

before they both dived off at speed leaving lines of bubbles on the surface. On the silk-cotton tree above us were two pelicans and five open-bill storks, and in the reed bed below, two purple herons, a large egret, and a black bittern (*Dupetor flavicollis*), while a few minutes later a chestnut bittern (*Ixobrychus cinnamomeus*) flew in, his rich cinnamon colour as if lit from inside in the last rays of the sunset. Before the sun finally left us that evening the head of a swimming body was seen moving across a stretch of open water only about 50 yards away. His wife said 'pani kutta' (otter), but then as we all looked more carefully the creature swam into sunlit water and we could almost see the separate scales on the head of the fine monitor lizard.

Another evening in a nearby *bil* I watched three rhinos apparently cropping the underwater grass, recently flooded. All three were below the surface, showing only the horn and two ears clearly. Every

minute or so one or other of the rhino would submerge completely, disappearing from view for about 10 seconds, and then re-surface with bits of mud and grass dropping from its lips. They must have been just in their depth most of the time, at nearly 6 feet of water, but now and again one of them would clearly swim in order to take up a fresh position on the bottom of the *bil*.

It is unwise to walk much in highly populated rhino country unless one has a following domestic elephant. The rhinos are not aggressive unless with calf, only curious to explore a certain smell or noise. Such a human smell must have agitated the two that came snorting and crashing towards me through the tall grass one afternoon. Luckily I heard them sufficiently far off to be able to reach a convenient tree which I went up like a monkey. They then came up to the tree and one even appeared to look upwards to my precarious position on a low branch; afterwards, wheeling off, they made a circle through the reeds returning with snorts to the same tree. This was repeated yet again and made me so nervous I couldn't hold my camera still! Presumably they got my scent again each time they withdrew and this stimulated another sally. So, on the third circle when they reached the farthest point, I came down and ran the fastest half mile of my life to a waiting jeep.

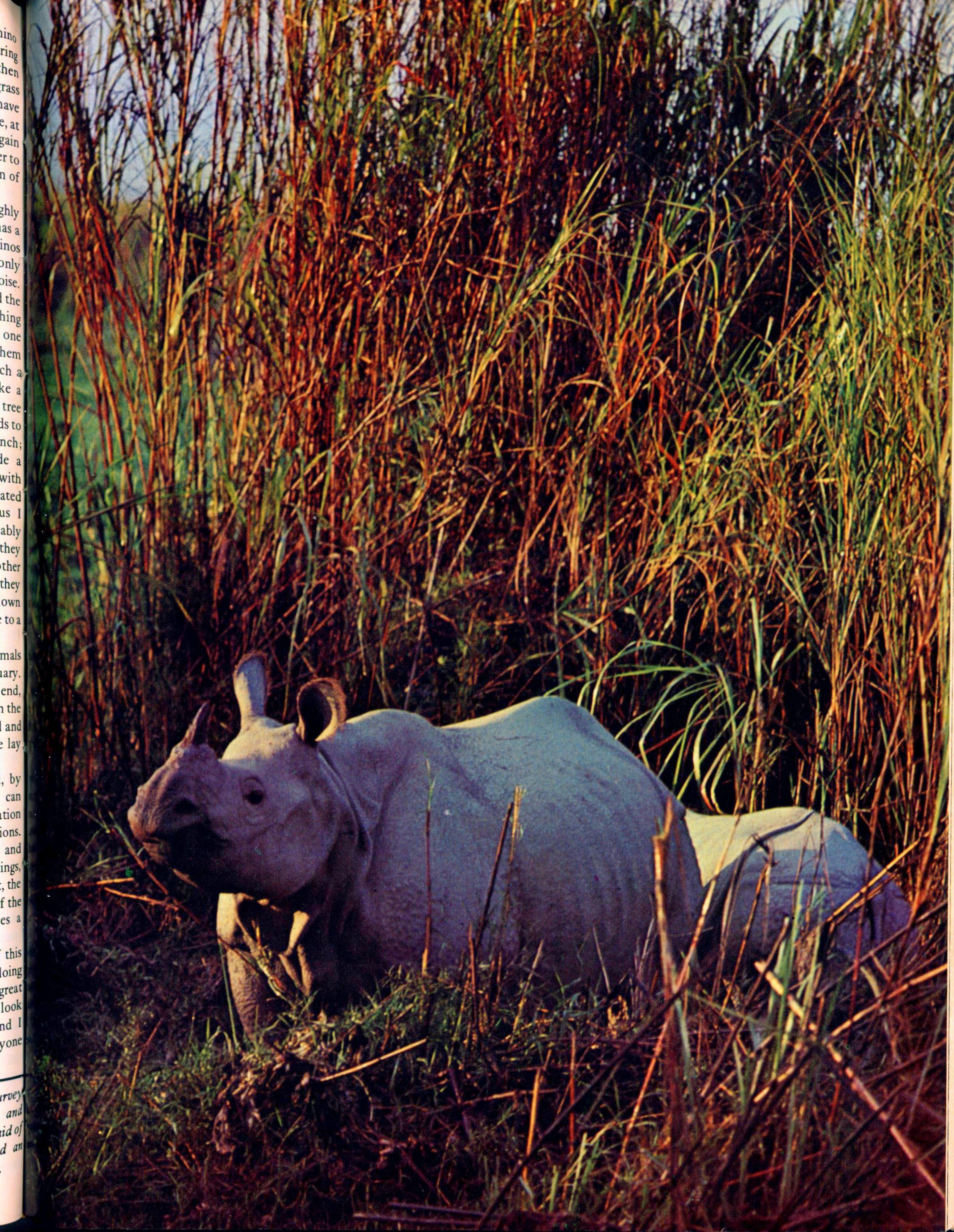
There is much evidence of animals feeling a sense of security in a sanctuary. Recently an old bull rhino, sensing his end, came deliberately near a guard post on the edge of the park. The guards even fed and watered him for three days where he lay before he died.

Kaziranga has a great future and, by reason of its habitat and species, can combine most happily wildlife orientation and development with tourist attractions. Animals can be seen easily and comfortably in their natural surroundings, and although the sanctuary itself is flat, the backdrop of the snow-covered peaks of the Himalayas in the cold season gives a fabulous setting.

I hope to have given some idea of this magnificent sanctuary whose staff is doing such a fine job in protecting the great Indian one-horned rhinoceros. They look after their tourists equally well and I strongly recommend a visit for anyone who can get to India. ●

*RICHARD WALLER carried out a survey of India's wildlife sanctuaries and endangered species in 1970 with the aid of a grant from WWF. He contributed an article on the tiger to our August issue.*





nino  
ring  
hen  
rass  
have  
e, at  
gain  
er to  
n of

ghly  
as a  
inos  
only  
oise.  
l the  
hing  
one  
hem  
ch a  
ke a  
tree  
ds to  
nch;  
le a  
with  
ated  
us I  
ably  
they  
other  
they  
own  
e to a

mals  
uary.  
end,  
n the  
l and  
e lay

, by  
can  
ation  
ions.  
and  
ings,  
e, the  
f the  
es a

this  
loing  
great  
look  
nd I  
yone

urvey  
and  
aid of  
d an