SESHADRI, Twilight of India's Wild Life. 1969

IV

THE LAST OF THE RHINOS

Nature alone knows what she aims at.
JOHANN WOLFGANG VON GOETHE

IT WAS around the year 1910 that concern seems to have been first expressed about the future of the giant rhinoceros of Asia, the great onehorned rhino (*Rhinoceros unicornis*). The then estimate of just over a thousand animals was sufficient cause for alarm. The first steps to legislate for its protection in India were initiated. Rhino were officially closed to sportsmen in Bengal and Assam. Many years later, in 1932, the Bengal Rhinoceros Act was passed, and in 1954 the Assam Rhinoceros Bill became law. The bills prohibited the killing, injuring, or capture of any rhinoceroses, and penalized contravention by fine or imprisonment.

Yet, this largest of the Asiatic rhinoceroses had a former range extending from the north-western passes of India eastward towards Burma, precisely how far east is not known. Historical and hunting references leave no room for doubt that it must have lived in large numbers once. Lydekker said in his *The Great and Small Game of India, Burma, & Tibet* (1900):

> In the history of Timur-bec it is described how in 1398 on the frontier of Kashmir, Timur hunted and killed many rhinoceros. In the memoirs of Baber it is described how in about 1519 he hunted rhinoceros in bush country near the Indus. And in the book of Sidi Ali dated 1554 it is stated that rhinos were seen near the Kotal Pass west of Peshawur.

The Emperor Babar wrote:

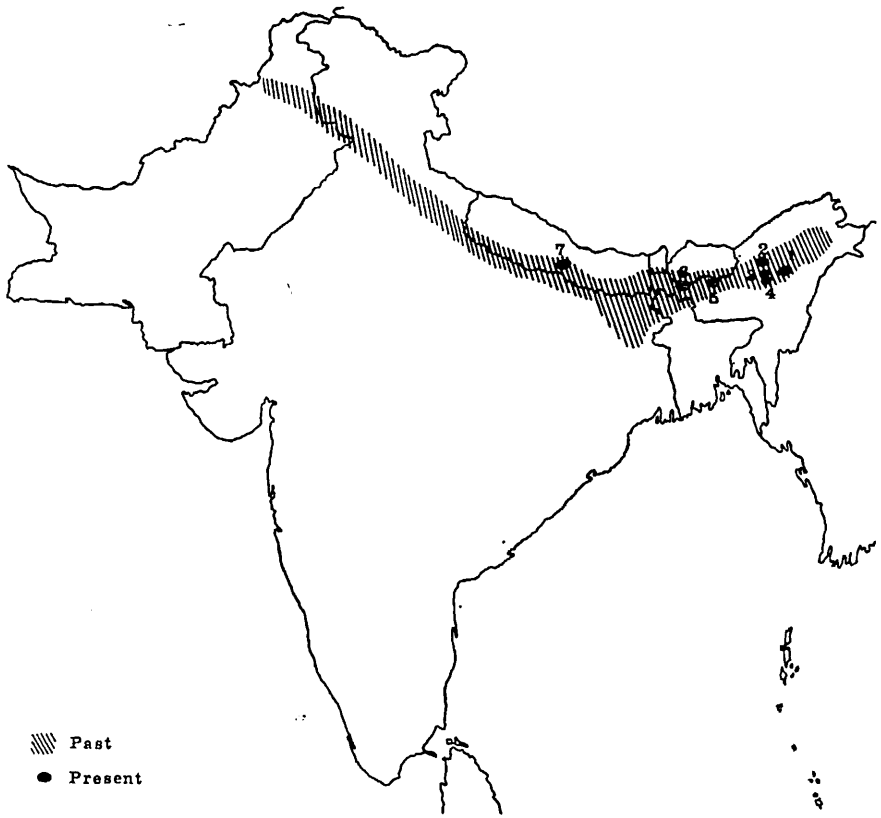
> Crossing the Black Water near Bigrain[1] we formed a hunting ring, facing downstream. Presently someone came up with word that a rhino was in a small jungle near at hand, and riders had surrounded the jungle, waiting there for us. We rode on with a loose rein, spreading out to join the ring and raising an outcry. The shouting brought the rhino into the open. Humayun and those who had come across the mountains with him had never seen such a beast before, and were much amused. They followed it about two miles, shooting many arrows. It was brought down finally without having made a good set at a man or horse. Two others were killed.
>
> I had often wondered how a rhinoceros and an elephant would behave if brought face to face. In this hunt the mahouts brought forward the elephants. One of the rhinos charged out where the elephants were. When a mahout put one of the elephants forward, the rhino would not stay but charged off another way.

[1]Peshawar.

Lydekker wrote further:

> There is historical evidence to prove that during the early part of the sixteenth century the Indian rhinoceros was common in the Punjab, where it extended across the Indus as far as Peshawur; and down to the middle of the present century, or even later, it was to be met with along the foot of the Himalayar as far west as Rohilcund and Nepal, and it survived longer still in the Terai-lands of Sikkim. Not improbably, too, the rhinoceros found till about the year 1850 in the grass-jungles of the Rajmahal Hills, in Bengal, belonged to the present species.

It was about the time of Babar's hunt, in 1515, that the first Indian rhino is known to have been sent to Europe. It was a present from the King of Cambay to King Emmanuel of Portugal, and was shipped from Goa to Lisbon. A fight was arranged in Lisbon between this rhino and an elephant, and the elephant, upon seeing the rhino, is said to have burst the arena and fled! King Emmanuel, who must have been very impressed, then decided to present the rhino to Pope Leo X. It was shipped again, but the ship was caught in a storm in the Gulf of Genoa and sank with all hands and the rhino. This was the animal immortalized by Albrecht Dürer in an engraving; Dürer never saw the rhino but did his work from a sketch by a Portuguese artist.



MAP I
Past and present distribution of the great onehorned rhinoceros. Survival areas are; 1 Kaziranga; 2 Sonairupa; 3 Orang; 4 Laokhowa; 5 Manas; 6 Jaldapara—Gorumara; 7 Chitawan (Nepal)

The first Indian rhino to enter England, in 1684, was paraded round the country for the next two years. But African rhinos had often been brought to Rome in classical times, probably the white or squarelipped rhinoceros, a more tractable animal than the black rhino.

In northern Bengal, the rhino was once sufficiently numerous to be saddled with a major responsibility for the destruction of rice and corn fields—with little justification, however, as the great Indian rhino is not a crop-destroyer, although occasionally it may enter cultivated fields for titbits. The government even offered a reward of Rs. 20 per head for its destruction.

In his *Thirty-seven Years of Big Game Shooting in Cooch Behar, the Duars, and Assam* (1908), the Maharajah of Cooch Behar records monotonously the slaughter of rhino (and other animals) in the Princely shoots he organized every cold weather and, indeed, it seems, at every opportunity. The 'best' sport seems to have been on a day in 1886. He writes, 'A blank day on the 15th was followed by a magnificent day's sport with Rhino near Rossik Bheel and Chengtimari or rather half a day's, for we bagged five rhinos before luncheon. I do not think this record has been beaten.' Today, from this once-plentiful rhino tract, the great beast survives only in the Jaldapara Sanctuary, with a few stragglers outside, estimated at about fifty-five animals in all.

How quickly can animals go! In a letter dated 31 May 1952, to *The Statesman*, Calcutta, Mrs. Jamal Ara, the noted Bihar naturalist, pleaded for a rhino sanctuary in Bihar. Rhinos in Bihar! It is already a thing of the past now. They were once plentiful there, below the Himalayan foothills and even some way into the interior, but Mrs. Ara was referring to survivors in the Purnea district. The last of these were killed off when work commenced on the huge Kosi river project in that area.

The position in India after the first world war was that sportsmen could not legitimately hunt the rhino. But, in Nepal—the second survival home of this rhino—it was a different story. The Cooch Behar record was no record there, and the former rulers' shoots used to lay low rhino by the score. High-caste Hindus and Gurkhas considered the flesh and blood highly acceptable to the gods. Those who could hunted the animal and offered libation of its blood after entering the disembowelled body. Special shoots arranged for distinguished visitors took

heavy toll. Reading accounts of them, there seems to have been little real sport. The sportsmen were mounted on an army of trained elephants, the rhinos were surrounded, and then made large and slow-moving targets into which lead was pumped. The real thrill, one imagines, must have come later—in the photographs that were taken with the sportsman resting his right foot on the chopped-off head of the victim, with more heads lying about in the gore with their unevenly hacked necks. The photos advertised the hunter's skill and prowess to faraway relations and admirers. Far superior in the numbers of animals killed to anything in Bengal, a bag of ten or fifteen rhinos in a day at a specially convened shoot was nothing out of the ordinary.

The attitude of the highest in the land is typified in the following account given by Armand Denis in his book *On Safari* (1963). He had been received in audience by the Maharajah.

> After a while I managed to explain that if it was possible I wanted to shoot scenes of animals in Nepal. At once the Maharajah's face lit up.
>
> 'You shoot?' he said.
>
> I tried to explain that the sort of shooting we did was with cameras but he did not seem to understand the distinction I was making between this and big game hunting, and led me off to another room. It was really a hall, some forty feet long, and I realised it was the Maharajah's own trophy room. An artist had been brought all the way from Paris to cover one whole wall with an immense mural depicting, in heroic proportions, the Maharajah hunting rhinoceroses in the Himalayas. Along the length of the hall ran a series of low marble pillars. There must have been at least twenty on each side of the room. On each, expertly mounted, rested the stuffed head of a rhino.
>
> That great room itself with its unspeakable mural was unpleasant enough, but those forty heads sent shudders down my spine. For they were the heads of East Indian rhinoceroses[1] and as far as I knew there were hardly forty still in existence.[2]

[1]There is no rhinoceros of this name, but he was obviously referring to the great Indian rhinoceros.

[2]This was a gross underestimate.

> Suddenly this macabre collection seemed to expose the whole cult of big game hunting for the gruesome, useless business it is. As politely as I could I said to the Maharajah, 'You are aware, of course, Your Highness, that there are very, very few of these animals left and that when you have shot the last of them the whole species will then be extinct.'
>
> He took his time to reply and then turned to me and winked.
>
> 'I think you will find', he said, 'that there will be just enough to last me my lifetime.'

Even so, the rhino was still common thirty years ago in many parts of Nepal and in the Sikkim *terai*. But with such organized slaughter, numbers began to deplete. A slow breeder, the ancient animal could never catch up with the losses. In the late 1940s, the rhino was not to be seen in Nepal except in the Chitawan jungles, east of the Gandak river. External pressure began to be brought on the Nepal Government to protect the rhino.

As the numbers decreased, the value of the rhino's horn, most coveted of all its anatomy, increased. The meat and hide could be sold, but it was the false horn, which in an adult animal weighs from two to five pounds, that was of prime interest to poachers. It is false horn, because it is nothing but hair matted together so solidly as to appear and feel horn-like. The first poachers came with muzzle-loaders heavy enough to dispose of the rhino, or caught it in pits. The horn has been highly prized in the East from early times. It was endowed with a host of magical properties. In powdered form it is still today considered in east and south-east Asian pharmaceutical trades a most potent aphrodisiac. Old accounts describe how the horns were sold in the Calcutta market—the most important rhino horn market in Asia—for 'half their weight in gold' and how eventually most of them found their way to China. It is known that in the first quarter of this century, single horns were sold for prices higher than £150. Lee Merriam Talbot reported in 1955, during an investigation of the status of the three Asian rhinoceroses, that he saw individual merchants in south-east Asia offer prices as high as $2,500 for one horn. In Sumatra, one Chinese merchant was offering a new American automobile in trade for a whole rhinoceros.

The horn had also other uses. A small fragment enclosed in a charm and worn round the neck or wrist made the wearer invulnerable to enemies. Extraordinary properties were also credited, to a lesser extent, to other parts of the body. Chewing the dry meat gave immunity against dysentery. Drinking the urine was a certain cure for all skin diseases. A sliver of bone inserted in an incision made on the arm injected the rhino's enormous strength into the man. Local hill tribes such as the Lhotas still bury a piece of rhino bone in their fields for a good harvest. Plaster made of the dung cured all kinds of swellings. Soup from boiling the umbilical stump was a certain cure for rheumatic and arthritic complaints. The Rengmas, another tribe, believe shields made from rhino hide impregnable in battle. This tribe has the further curious belief that the rhino sleeps on very steep ground, hooking its horn round a tree to save itself from slipping. It is easy to see that the poor beast, with such superlative qualities in its fleshy make-up, simply invited trouble.

Lest it be thought that rhinoceros superstitions are all of Eastern origin, many of these beliefs were once widely held in Europe. Rhinoceros-horn cups, for instance, were used by kings and popes to show up poison in their drinks by making the drink froth, or even cracking the cup. Rhino horn was also prized as an internal medicine, particularly for complaints of the stomach, well beyond the Middle Ages. Therefore, with the price they have carried on their heads, and indeed other parts of their anatomy, the wonder is not that rhinos are rare but that they exist at all.

Projects in India and human settlement in Nepal have, from another direction, attacked the rhino by destroying its habitat. In India, it survives only in a few localized sanctuaries, chief among which are Kaziranga in Assam and Jaldapara in West Bengal. In Nepal, total disaster threatened it, as a sudden land rush to its haunts in the late 1950s and early 1960s began to overwhelm it. However, R. S. M. Willan, Chief Conservator of Forests in Nepal, reported in 1965 that illegal settlers had largely been removed from both the King Mahendra National Park and the Chitawan Wild Life Sanctuary—both of recent genesis—on the orders of the present King of Nepal, and as a consequence rhino seemed to be recovering somewhat, with

many calves seen about. Now, the survivors in the valleys of the three rivers, Narayani (or Gandak), Rapti, and Reu, appear to be receiving a better measure of protection.

The rhino is a miracle of survival in the ruthless evolutionary process, in the disappearance of old life forms and unfolding of the new, a real present-day monster, but a peculiarly likeable one to those who have some degree of acquaintance with it. Kaziranga is an area of monstrous swamps and therefore an appropriate habitat for monsters. Each time I have visited it, it seemed worse than before, with more areas squelchy and spongy even where they were not covered with water treacherously overlaid with water-hyacinth and smelling to high heaven. This impression may not, however, correspond to fact; it simply seemed to me so.

The sanctuary lies on the south bank of the great river Brahmaputra, and the swamps are intermingled with great expanses of high, coarse grass, which can top fifteen feet or more, and open forest, watercourses, and reed beds in the north. On its south, it is bounded by the Diphlu river, which is close to and parallel with the Assam Grand Trunk Road, the main arterial highway in the State, beyond which are the Mikir Hills, of significance to it, as the wild life of the sanctuary seeks refuge on the hills when the flood waters of the Brahmaputra pour over the swamps in the monsoon. The hills are clothed with the semi-evergreen and rain forests typical of Assam, and offer good cover for the animals, but their danger is great during the period of migration when they are killed in large numbers by the waiting poachers.

The sanctuary can be entered at more than one place, but is most easily accessible at Kohora by a jeep track which runs through open ground and paddy fields, which act as a buffer zone between the sanctuary and the grazing lands of domestic livestock. Riding on an elephant in the thick grass, the grass looms over on all sides, and its sharp edges can cut into the flesh like a knife. On my first visit to Kaziranga in 1958, I saw my first rhino, a big bull, almost immediately on entering the sanctuary and while still on foot, making the transfer from jeep to elephant. I quickly scrambled on to my mount, a young female, and attempted to get near the rhino which was in a small, muddy pool. Due to some bad manoeuvring by the

mahout and the greed of my mount, who on that trip never lost an opportunity of stopping and stuffing herself noisily with masses of green food, we were too slow, and the rhino beat a squelchy retreat from the mud-pool. He was an old beast, and I could see his flanks and rear were studded with masses of tubercles, which are characteristic of adult animals and become more and more prominent with advancing age.

A mother rhino and her calf on the far side of a *bheel*, as a small lake-swamp is called in these parts, made an interesting group. Rhino calves keep with their mothers for three years or more. The cow does not breed during this period, and a female therefore gives birth to a calf only every four or five years—a slow breeding rate. Cow rhinos with young calves are known to have unpredictable tempers, and remembering the story that had been told to me the previous evening of the American visitor to the sanctuary whose elephant had been determinedly pursued by a mother rhino till she had inflicted a severe cut in the elephant's side, I did not consider it prudent to press too close an acquaintance with this mother. From where I was, she appeared to be almost white, in contrast to the big fellow I had seen before who was the usual ashy-grey, but this was due to the tricks of the early morning light and the ground mist which still hung about. The great onehorned rhino inflicts injuries with its long lower teeth and not with its horn, as is generally believed. This is done by a quick side movement, and a terrible wound can result. I have seen the technique of it during later visits to Kaziranga, in not-too-serious tussles between bulls.

On this trip, as on others, a trying problem was to convey my wishes to the *mahout* for manoeuvring the elephant to positions advantageous for watching or photography. Once he has understood, and is willing, he has a far easier task translating these wishes to the elephant, who obeys without demur. More particularly in late years, *mahouts* have been slovenly, some not refraining from smoking *bidis*, or cigarettes made from rolling tobacco leaves, while conducting visitors into sanctuaries, or desisting from noisily clearing their throats and spitting, a nauseous habit. Casual visitors probably do not complain, but cannot be pleased, but how infuriating all this can be to one with more than casual interest or who has travelled a long way to film or photograph animals is difficult to put into words.

Wild life is not disturbed by an approaching elephant, but reacts to human noises or human-inspired smells. *Mahouts* may know all about their charges, the elephants, but often lack judgement in approaching wild animals, and worse, many of them just will not listen to suggestions as they consider themselves superior in junglecraft to any visitor.

Twice I was exceptionally close to rhinos in wallows, but these were by accident rather than by design. On both occasions, as my elephant cleared the tall grass, the wallow was at her feet, with the rhino in it. Both incidents ended with the rhinos steadily backing from the muddy water into the thick grass with ponderous, clumsy movements, their great weight causing their feet to slip and slither in the mud and the slush. They kept their piggy eyes on the elephant while accomplishing this retreat, puffing and snorting their disapproval of this invasion of their special hideout.

On another day, I entered the sanctuary from its south-western side, and the memory of the unspoilt wilderness of that area will always remain with me. Once we broke from tall grass into a clearing where the grass had recently been burnt, and in the centre of the clearing was a large rhino bull cropping the new shoots that had sprouted after the fire. He soon saw us and trotted off picking his feet off the ground daintily—it is possible to get this impression—stopping a couple of times to look back and see if he was being followed. Then there was another big bull who was unhurriedly cropping grass in an overgrown clearing. Terry and June Bassett, from Canada, mounted on another elephant, were anxious to film a rhino at close quarters. Their *mahout* urged his elephant as close to the rhino as he would permit. The rhino remained unprovoked, and had been finally driven to the edge of the grass jungle, where he stood his ground for a minute or two. He pawed the ground, looked formidable, and it seemed he might resent being pushed off his ground in this way. However, nothing happened and, wheeling round, he disappeared into the grass.

Often on the backs of rhinos were cattle egrets, pied mynas, or both, valets of the animal kingdom. Appropriately, it was Herodotus, the father of zoology, who first wrote of this association of a small creature with a big one. In his account of Egypt he wrote:

> The crocodile is a foe to all birds and beasts, but the courser, which does it a service. For, living in the water, it gets its mouth full of leeches, and when it comes out and opens its mouth to the westerly breeze, the courser goes in and gobbles up the leeches, which good office so pleases the saurian that it does the courser no harm.

There are many such associations in the world of wild animals.

My last visit to Kaziranga was made in summer 1965 with Diana and our boys. The evening of our first entry into the sanctuary was hot and the distant rumble of thunder from behind the hills broke the silence in the still air. We soon arrived at the brink of a large expanse of swamp, almost completely covered with water-hyacinth. There before us was a pair of rhino, bull and cow, then beyond them a big bull, and yet another pair in an arm of the swamp on the far side. What a first reception to rhino-land it was to them! The filming which followed involved a great deal of elephant-manoeuvring, but the rhino were patient, and so it was accomplished with a good measure of success.

On a subsequent sortie on my own, I saw many rhino, and they were a cheering sight after the heavy loss to poachers in late 1964 and early 1965, when some twenty animals had been reported killed. Four rhino were brawling in a swamp, but hastily squelched their way out of it as I moved in on the elephant. In front of us materialized a great fellow who decided to go on with his morning ablutions despite the intrusion. Very deliberately, he sank into the water, which smelled very rank, till only his nostrils and ears were visible. We went right up to him, and beyond a show of faint interest in his piggy eyes, he was not disturbed in the least. Then there was another bull on the far shore of the same swamp who was equally nonchalant. He did not even deign to look at us as we drew near and stood by him. It is difficult to tell bull and cow rhinos apart, unless one is close enough. When at last I left the sanctuary, it was with the wish that the rhinos would ever thus remain placid and prehistoric in their last important refuge.

One local notable put the annual loss of rhino to poachers at thirty animals. In the 1964–65 scare, the carcasses were all found in the northern part of the sanctuary, and in one period of

intensive search, thirteen carcasses and over fifty poachers' pits were said to have been discovered. In all, there were a hundred pits. Visitors to the sanctuary are shown around the southern fringe only, and the interior or the northern part which is waterlogged is seldom visited even by range staff owing to difficulties of terrain. Poachers accordingly cross the Brahmaputra from the north and gain ingress into the sanctuary. As an aftermath of the poaching, even as late as the time of our visit, May 1965, the bazaars on the borders of the sanctuary were rife with rumours of the money involved, said to be in the region of Rs. 4 *lakhs*. After the discovery of the carcasses and pits, the ensuring publicity was perhaps what brought the depredations to a temporary halt—temporary because the activities will no doubt be resumed should a favourable opportunity present itself. This nefarious work will cease only when the demand for rhino horn disappears, and as this is not likely to happen for a long time yet, the rhino is dependent entirely on the effectiveness of the protection given to it in the meantime. Unregistered animal dealers told me that year that a good-sized rhino horn was worth, in Calcutta, anything from Rs. 5,000 to Rs. 20,000, there apparently being grades of horn, appreciated only by connoisseurs of rhino products. They were unwilling to talk about the poaching bonanza, but vaguely indicated that the enterprise was financed by a Calcutta businessman. The ultimate destinations of the horns were said to be China, Hong Kong, and south-east Asia. With such big money involved, no wonder the poachers consider the risks worth taking.

The Government of Assam annually auctions horns recovered from rhino carcasses in the sanctuary and other reserves—these animals may have died from natural causes, or as a result of fights, or from predation. I have doubts about the ethics, or indeed the wisdom, of these auctions, despite the substantial income that is derived from it. After all, the Government sells something it knows to be utterly worthless. I wonder if the total destruction of the horns in public, announced and notified, would not have a long-range effect in demonstrating how useless they really are for any purpose.

Kaziranga, like the Hluhluwe Reserve in the Union of South Africa, had its rhino personalities. The most famous of them was 'Burra Goonda' (corruption of 'Burra Gaenda' or 'Big Rhino')

who died in 1953. No one knew how old he was, but for the last fifteen years of his life he hardly left the locality he favoured on the southern fringe of the sanctuary, and visitors were assured of a close view of him either placidly wallowing in a mudpool or grazing peacefully amongst domestic animals on the verge of the sanctuary. He had many scars of battle with other rhinos, but at this period had become so gentle that with care he could be approached closely on foot. He was Kaziranga's most photographed rhino. The *mahouts* still tell a story, apocryphal no doubt, of how once a brave army officer actually hand-fed him with grass and then slapped him on his rump as much as to say, 'Well done, old boy.' The riding elephants of the time knew him, and he knew them.

After his death, his place was taken by another old bull, 'Kankatta', or 'Torn-ear'. From being an aggressive animal, he settled down to the vacated number one position and lived for four years.

The Jaldapara Sanctuary in north Bengal is, after Kaziranga, the rhino's most important refuge in India. The cover is thick, and the interior unexploited. Unfortunately, however, it is in a strategic area and, in the event of conflict between India and her northern or eastern neighbour, will be in the direct line of fire. With the Chinese invasion of 1962, huge army encampments sprung up everywhere in the region, some being set up within the sanctuary at Baradabri preceded by heavy tree-felling. As always when fighting men move in, poaching increased, and I saw many poachers' pits when I visited the sanctuary in October 1963. However, in 1965, the army was finally persuaded to leave after protracted negotiations, and when I was again in the sanctuary in October that year, things seemed to have much improved.

In 1963 I had taken my family with me, and after spending a couple of days at Chilapata and finding it too far away for daily visits to the sanctuary, we camped at Kodalbasti, a little-known Garo village just outside it. To enter the thick jungle of the sanctuary, the mountain torrent of the Torsa had to be crossed on elephant-back. Some arms of the river were shallow, but others were crashing floods after the plentiful monsoon rains of that year. Our riding elephants were in considerable difficulty, and the crossings became hazardous as the water came up to

the pads on which we were seated and swirled and poured past carrying driftwood and boulders with it. The elephants, urged by the *mahouts*, knew what to do. They turned in the heaving waters, never more than just a little at a time, to face the flood and slowly sidled to safety on the other shore. This they did at each tumultuous crossing, but the experience was not pleasant, till finally we had to give it up as too dangerous and nerve-racking.

From the river bed, the snow-capped Himalayas were always visible and made a magnificent setting to a very lovely area. Silver-tipped grass on the islands in the river bed waved gently in the breeze, and the only sound was the crash and tumble of the water. The grass was exceedingly tall and the undergrowth very lush after the rains. The jungle was impassable in places, and the elephants tore their way through, knocking down whole trees where it was necessary, never putting a foot wrong, so that their progress was a wondrous thing to watch. Not a glimmer of animal life showed anywhere, but one sensed the unrest of secret lives in the jungle. Lianas and creepers festooned and overhung our path, and the elephants neatly grasped them in their trunks and flung them aside, while, if some fell back to obstruct our passage, the *mahouts* used their sharp-bladed *kukris*, or daggers, to telling effect. These men carried on subdued and affectionate conversations with their charges, but for reasons beyond our comprehension suddenly stung them into obeying orders with blunt stabbing daggers. We have observed this repeatedly, and the slight wounds on the top of the head are never allowed to heal fully, and the *mahouts* seemed to be keeping them deliberately open to receive the stabbing blows to intimidate the elephants. I have spoken about this to forest officers and wild life wardens, and they have agreed it was an undesirable practice, but for some reason nothing is done about it. This was the one distressing part of elephant-back travel.

Where possible, we followed rhino paths, which were often tunnel mazes ploughed in the thick undergrowth by the ponderous beasts. And suddenly we saw our rhino. We were plunging through thick and very tall grass which topped the elephants' backs by a few feet, when my tusker, who was leading, came face to face with a big bull rhino. The surprise

was mutual. There was a confused noise of snorts and I could not tell which snort came from which animal. The two giants of the animal world faced each other for a few seconds. The tusker was steady and held his ground, but the rhino's heart gave way and he wheeled right round into the black tunnel from which he had emerged. The elephant whiffed disdain and started to follow him, and the smaller female elephant with Diana and our younger son began to move up too. We had advanced a few steps when something rushed and moved in the tunnel. The rhino peered out and as suddenly turned again, and I had a last glimpse of his hindquarters as he disappeared. Soon, movement in the undergrowth told us that he had doubled back and was moving fast and away from us, perhaps to a favourite feeding ground of wild ginger and marsh reeds to restore his self-respect. Our then five-year-old, not a bit afraid, urged us after the beast. But circumstances were not propititious for a chase. I had hastily to ask the *mahouts*, as they prepared to carry out the imperious order of that small voice, not to attempt a follow-up into that tunnel of vegetation, black as Hades, and just then the rhino's room seemed preferable to his company.

Another trip I made into the sanctuary with the older boy stands out in my memory for the way in which our riding elephant, a big female and a lovable one, 'Kamaladevi'—each morning she used to come to us for titbits, shrill squeals announcing her arrival—herself tried to locate a rhino for us. It was perfectly amazing how she responded to her *mahout*'s whispered commands. He often held consultations with her as to what we should do next, and the decision, it seemed, did not always lie with him. Once we were hot on the trail of a rhino, and my son and I followed with astonishment the way she picked up his scent trail, now selecting this side of a forked path, and now the other, now examining a thick undergrowth by lifting the masses of bush and leaves and creepers, and now whooshing before a tangle of vegetation, daring the rhino to come out. It was a quarter of an hour of wonderful flurry, and though we did not find the rhino, it became a memorable experience.

In Nepal, much of the main rhino area has been affected by human invasion, as mentioned before, though a recovery has been reported. Multi-purpose development projects are

planned, and how effectively the rhino and other wild life will be safeguarded in the changing years of the future remains to be seen.

The estimated world population of the great onehorned rhino is now thought to be about 745, connecting the figures of Gee (1963), Willan (1965 for Nepal), and J. J. Spillet (1967). Of this number, Assam has 525, Bengal 55, and Nepal 165. Again, of Assam's number, Kaziranga alone is thought to have 400. The other Assam sanctuaries with rhino are Manas, Sonairupa, Laokhowa, Orang, and one or two more very small reserves. A very few rhinos also live outside these sanctuaries, but their continued survival is uncertain with the poachers continually after them.

Kaziranga is, therefore, the rhino's most important survival home by far. It is also the best looked after of the Assam sanctuaries. Even more needs to be done to ensure its permanence. Poachers apart, the pressure of human population on its borders is a threat which could lead to excision of small parts from it from time to time, if not guarded against. Demands have many times been made for more grazing area for the proliferating domestic livestock, and this problem, I was told, had frequently figured in the manifestos issued by local political parties during elections. Danger also exists from the proximity of cattle, in that any disease carried into the sanctuary by them will have serious consequences. Surveillance itself, within the sanctuary, has also to be improved by provision of facilities for the ranger staff to patrol the area which is both large and difficult—such as wheeled transport, and boats for use in the northern riverside parts. The annual flooding is also a grave problem, as it leads to loss of wild life during its migration to higher ground. But it may be a mixed blessing, for the floods may be of benefit in maintaining the sort of habitat favoured by both rhino and buffalo, which latter is the sanctuary's second most sought-after wild animal.

The great Indian rhino is of extraordinary interest to natural history. It is incapable of adapting itself to new circumstances or environment. In the final event, whether it will survive all the assaults on its continued existence will depend on the effective adoption of a policy which will safeguard it from every angle. There is no room for complacency with a world population of

only 745—and remembering that the other two Asiatic rhinoceroses, the lesser onehorned or Javan and the twohorned or Sumatran, also lived in India but do so no longer. The first of these disappeared from Indian limits probably around the turn of the century, but the latter is believed to have survived as late as the mid-1930s in the Mizo Hills.

The great rhino is a truly harmless animal, and does no damage whatever to human interests in the places where it still lives. It is often misrepresented as being aggressive or attacking on sight. Its blind, withering charge is delivered only when it believes it is in danger or when it is surprised in its haunts. Of course it is then very dangerous. Otherwise it is neither truculent, nor a crop-raider. It is one of India's most spectacular animals, a left-over from bygone ages, and a source of mystery and wonder to all who see it in its natural home.

V

EXTINCT AND NEAR-EXTINCT

> . . . one of the greatest crimes of which man is capable is to permit the extermination of any form of wildlife. A species is a unique organism, one that has been produced by the action of natural forces through the ages and one that, when lost, is irreplaceable.
>
> IRA N. GABRIELSSON

FOR MANY YEARS I had searched records, reports, and sporting accounts for mention of the Indian cheetah (*Acinonyx jubatus*) in the wild state. I had examined every report on wild life of the Forest Departments of the various States to which I was given access, and even followed up newspaper stories of the shooting of a cheetah. Finally, in 1959, I arrived at the only possible conclusion—that the cheetah was extinct in the wild, and I reported it in an article which appeared in *The Field*.

The last reliable mention of a live wild cheetah was made by K. M. Kirkpatrick who reported seeing one on the road near Chandragiri, in a low hilly tract in the heart of southern India, on the night of 28–29 March 1952, while he was out driving. There have been occasional newspaper stories since of the shooting of a cheetah, but these, followed up, always led to a leopard, and only showed that most people and many sportsmen in India do not know the difference between the two animals.

The only other evidence of the existence of the cheetah in the wild after 1950, came to me as I was composing parts of this book in winter 1965, when I was presented with a copy of the book *Wilberforce Our Monkey* (1958) by its author, James Milne, when we, both grass-widowers, were living in the Calcutta Club. I came across a passage describing an encounter with a cheetah on the Orissa-Hyderabad (now Andhra Pradesh)

THE TWILIGHT OF INDIA'S WILD LIFE

Balakrishna Seshadri

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