## THE INDIAN RHINO, A LIVING FOSSIL

By LEE MERRIAM TALBOT

## A record of encounters with the great Indian rhinoceros in Assam, and of the preservation work carried out

THE Indian Airlines plane glided smoothly past the broad expanse of the flooded Brahmaputra, bounced in the rougher air over the river-edge forest, and finally settled on the small Assamese airstrip. The sun, breaking through monsoon clouds, gleamed on wet leaves and pavement. As I stepped out on to the gleaming asphalt I wished that my nylon shirt was as cool as it was washable.

I had spent several months in the deserts of the Middle East and on the central plains of India, and the rich green vegetation crowding the small airstrip was a most welcome change. But the heat remained the same, and even seemed the worse for being so wet.

My target in Assam was the great Indian rhinoceros, huge relic of the prehistoric times when rhinos were one of the commonest land mammals on all continents. This rhino—more than six feet high at the shoulder and 14 feet long, with a weight estimated at more than two tons, and with a two-foot horn on its nose and an aggressive disposition to match—was probably undisputed lord of his domain, which, in recent centuries, extended from Indo-China to the Khyber Pass, from Kashnir to southern Siam.

Spreading agriculture and incessant hunting have brought the rhino to the verge of extinction. Today it remains only as a legend in most of its former range. Of the few hundred survivors, the greater numbers are in Assam, in north-east India. A few remain in nearby west Bengal and in the isolated kingdom of Nepal.

Rhinos carry a fortune on their noses. Prices as high as \$2,500 are currently offered for a single horn by Chinese traders—and this in lands where a man with a family may carn 10 to 40 cents a day. Throughout the Orient, every part of a rhino's body is considered to have medicinal or magic value. Properly prepared, it is considered good for everything from restoring lost vitality to extracting thorns.

But most valuable is the horn. It is considered, especially by the Chinese, to be the most powerful aphrodisiac. Rhino horn cups are believed to render poison harmless, so they have been standard equipment for eastern rulers of past centuries. Such cups still figure in religious ceremonies. The horn, powdered, splintered or whole, is supposed to have wonderful powers solving almost any problem, mental or physical. These beliefs have no known scientific basis, but command the unshakable faith of those concerned. So the wonder is not that there are so few, but that there are any rhinos left at all.

I was to be met at the airport by Mr. E. P. Gee, well known as a writer in The Field. Driving from Jorhat to his tea estate, we jolted along a narrow muddy road, apparently better suited for floating than for driving. Our muddy track led between the tea plantations with their neat rows of flat-topped, three-foot-high tea plants, carpet-like beneath the high trees that provide shade. In the lower areas, flooded rice paddies stood, their surfaces rippled by grazing or wallowing water buffalo. Here and there, on higher ground, we passed village clusters of thatch and wattle huts surrounded by cattle, chickens and dark-skinned children.

It was bazaar day-pay day in the tea gardens. As we approached the larger



villages, the roads were filled with brightly dressed people. Some carried packages, produce baskets or pots on their heads; others carried umbrellas, a wise precaution, I thought, considering the flooded area and the threatening appearance of the skies.

The village main streets were jammed with Assamese, and as we inched through them I had a fine chance to see the people in whose country I would spend the next several weeks. Mr. Gee explained that most of the gay holiday crowd were tea garden coolies, people who had come here from other parts of India to work on the estates. Many, he said, had been here for several generations. He pointed out groups of men and women with higher, almost Mongoloid cheek bones and more sombre dress than the others. These were the tribal people whose homelands were brush-covered hills rising abruptly on either side of the broad valley floor. "And those smiling women in the bright red, wearing all the bracelets, are Nepalese; so are those fellows who are selling knives."

That evening, sitting under the broad veranda of Mr. Gee's comfortable house, with rain running off the eaves and the night alive with the frogs' chorus, we discussed the objects of my visit.

It is estimated that there are fewer than 350 rhinos left in Assam. Most are now protected in Government reserves or sanctuaries. The largest number, about 250 Mr. Gee thinks, are in the Kaziranga Sanctuary, 55 miles down the Brahmaputra from the Jorhat airfield where I had landed. That was the area I had come to visit,

The sanctuary was established by the British near the turn of the century. It was thought then that perhaps only a few dozen animals remained there. Under protection they increased. But in the early 1930s, the forest officer in charge found the poachers so well organised that it required detachments of the Assam Rifles to dislodge them.

The present Indian Government appreciates the value of its unique charges. When I had the pleasure of meeting Mr. Nehru, the Prime Minister, one of his first questions was about the rhinos in Kaziranga. Conditions have changed since the early days there. The sanctuary now protects the last remaining concentration of these rhinos, and it is the only place where they may be readily observed in their wild state. There is now a staff of 40 caring for the area and guarding against would-be poachers of the area's rich wild life. The more I heard, the more anxious I became to visit the area and to see these legendary creatures about which I had heard so much.

Next morning, at half past three, we started down the slippery roads towards Kaziranga. Jackals stood, eyes shining in the headlights, then loped off into the tea gardens' darkness as we splattered by. Progress was faster once we hit the paved road, although we still had to dodge the occasional sleeping goat or cow, and still had to slow to a crawl in the flooded areas. We felt our way, and hoped that the road was beneath the water under us.

I was afraid, watching the lightning flicker behind the clouds, that a wet, unsuccessful day lay ahead. But when we arrived at Kaziranga about dawn, the overcast had begun to clear off and blue sky showed here and there. My spirits rose with the sun and the temperature.

The sanctuary lies on a flood plain in a bend of the Brahmaputra, bounded on one side by the broad river and on the other by the steep Mikir Hills. Its 160 square miles consist of a flat expanse of waving elephant grass which reaches heights of more than 15 feet by the end of its growing season late in the autumn. Here and there are open areas, bils, which are lakes in the wet season. A number of narrow, tree-covered ridges stand a few feet above the grass and provide the only dry shelter for the animals when the Brahmaputra is in flood.

Sanctuary headquarters is on the edge of the Mikir Hills. Here, just above the plain, a pleasant hotel for visitors has been built. The visitor can sit on the veranda and look out over the eight-by-24-mile expanse of the sanctuary to the great river. On clear days the snow-capped Himalayas beyond the river can be seen.

Our elephants were waiting for us, standing beside the road with their mahouts dozing astride their necks. They dwarfed the Land-Rover as we drove up. We had three bull elephants for the morning's trip. The largest was called Akbar.

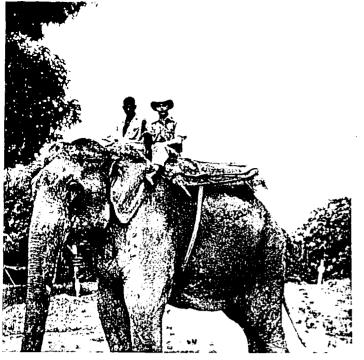
They knelt, and we both boarded a large bull, Mohan. The guddy, elephant saddle, used here is a large canvas pad filled with straw, with rope round the edge as a hand-hold. The passengers sit on that in any way that seems comfortable. I soon found that the comfort is relative and temporary. The mahout sits on the elephant's neck and directs him with his feet and a short, hooked metal bar. At the mahout's command, Mohan stood up—front end first. The guddy tilted alarmingly, and it took a strong grip to keep from sliding back down the way I had come up. Eventually, the hind end rose, the guddy levelled, and we were off.

Leaving the road, we first crossed a broad field of rice. Beyond the rice we came to an area of alternating patches of high and low grass dotted with small, muddy ponds. The several kinds of reeds, here collectively called elephant grass, are supposed to be very good rhino feed.

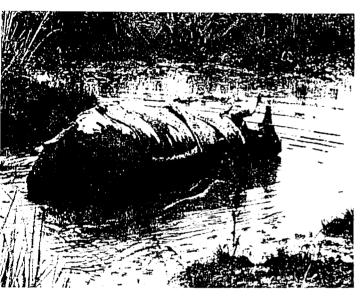
"The two extra elephants will help to find the rhino, but chiefly they are to herd them into better photographic positions," Mr. Gee told me when we mounted. This sounded rather curious, but I was soon to see what he meant.

When we left the rice the other elephants spread out to our right and left so that we could cover a larger area, and we started sweeping across the grassland. The first animal we saw was a jackal, bolting from the two-foot grass practically under Mohan's feet. Then came two little hog deer, beautiful rich-brown animals with very short, straight antlers. A considerable disturbance

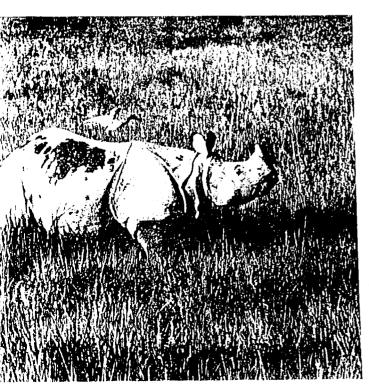
A CHARGE develops. An India, rhinoceros makes towards an elephant.



MR. LEE MERRIAM TALBOT on an elephant in the Kaziranga Sanctuary. The saddle consists of a canvas pad filled with straw, with rope round the edge which serves as a hand-hold.



THE BEAST'S SKIN hangs in folds at the neck, shoulders and hind quarters, giving the impression of armour plates. The rhino is more than 6ft, high at the shoulder, and its weight is more than two tons.



in higher grass turned out to be caused by swamp deer, called locally barasingha—12-point—because of its fine antiers.

We were, perhaps, only 200 yards into the grass when Akbar's mahout pointed off to our right, and all three elephants swung off in that direction. A little ahead was a mud wallow and in it, showing grey and indistinct through the grass, was a large rhino. It made no move till we had approached to within 30 yards.

Suddenly it came out of the water with startling speed and stood dripping at the edge of the grass, watching us. So this was the fabled rhinoceros! Its skin hung in great folds at the neck, shoulders and hind quarters, giving the appearance of armour plates. The legs and feet, elephant-like, extended down from beneath this armour and were partially studded with what looked like rivet heads, all wet and gleaming in the sun. Small, deceptively sleepy-looking eyes watched us from beneath and behind the thick, blunt horn.

It interrupted my thoughts with a loud snort, wheeled round and swung off through the grass. For an animal of that size and weight, it had amazing agility. It appeared to swing along lightly and effortlessly, yet left two-foot-deep tracks in the soft earth and passed, tank-like, through stands of grass that our elephants parted with visible effort. Mr. Gee beamed proudly. "Five years ago, at twice that range, they would have charged every time; there is proof of the effect of protection."

For the next two hours we explored through the grassland, seeing in all nine more rhinos. When we saw a rhino, or, more often, the cattle egrets riding their backs and serving as white beacons for us, the other two elephants would circle about and slowly herd the rhino into the best position for us to photograph it; or they would keep its attention while we moved up by ourselves.

Later on another morning I was riding Sher Khan, a mukhna—tuskless bull. With a smaller tusker ridden by an Assamese forester, I had been looking over a remete area, newly added to the sanctuary. In the infrequent openings we had seen hog deer, swamp deer, wild pig and sambar, and three big rhinos. Two of them were mothers with their several-hundred-pound babies.

We were heading for home, the elephants striding along, parting the towering grass with powerful sweeps of their trunks, when we unexpectedly burst into a small open area. Both elephants stopped dead. In the middle of the clearing, only a few short yards away, lay a small baby rhino. In front of it, tail raised and mouth open, obviously ill-disposed towards this intrusion, was its large mother. Suddenly, there was an awesome degree of noise. Both elephants trumpeted, and the rhino, grunting and snorting, plunged back and forth several times, throwing mud in all directions, then came right for us.

Sher Khan coiled the trunk up high, squealed in terror, wheeled round and bolted off through the grass with remarkable speed. Mother rhino, tail still up and mouth open, grunting at every step, was right behind us.

My nine-foot-high perch on the guddy seemed far too close to the rhino. We parted the 15-foot grass like a scared bulldozer, the stems and seed heads whipping into the mahout and me and the guddy pitching wildly. I wondered which would give first, Sher Khan, the ropes, or my grip.

The rhino caught up with us at the cost of little apparent effort. It followed, trying to get a tooth into Sher Khan's hind end. Having failed, it pulled alongside and, with a toss of the head, opened an 18-inch gash in the elephant's side. Sher Khan squealed again, lurched clear sideways, and took off faster yet in another direction. The rhino, apparently satisfied, continued in the same direction, throwing its head and snorting for another 100 yards, then disappeared into the grass. I had visions of its returning to its baby and telling it: "There, you see? That's how it's done."

Fortunately, the damage, although spectacular, was not serious. Probably the greatest injury was to the nervous systems of those concerned. All the way back, the mahout and Sher Khan kept glancing nervously from side to side. I cannot remember even touching a camera in the excitement. I had missed the picture of a lifetime. My disappointment could not have been greater.

But there is a sequel. Months later, when I had returned to my Brussels office and was going over my developed photographs, I unwrapped a newly received set of prints. There, through waving elephant grass and flying mud. came my charging fossil.

¶ Mr. Talbot is the staff ecologist, International Union for Conservation.—Ed.



THE HORN (left) on the nose may be worth up to \$2,500 to Chinese traders. A cattle egret alights.

THE RHINOCEROS population in Assam has been estimated at some 350.