Indian Wildlife

Sri Lanka
Nepal

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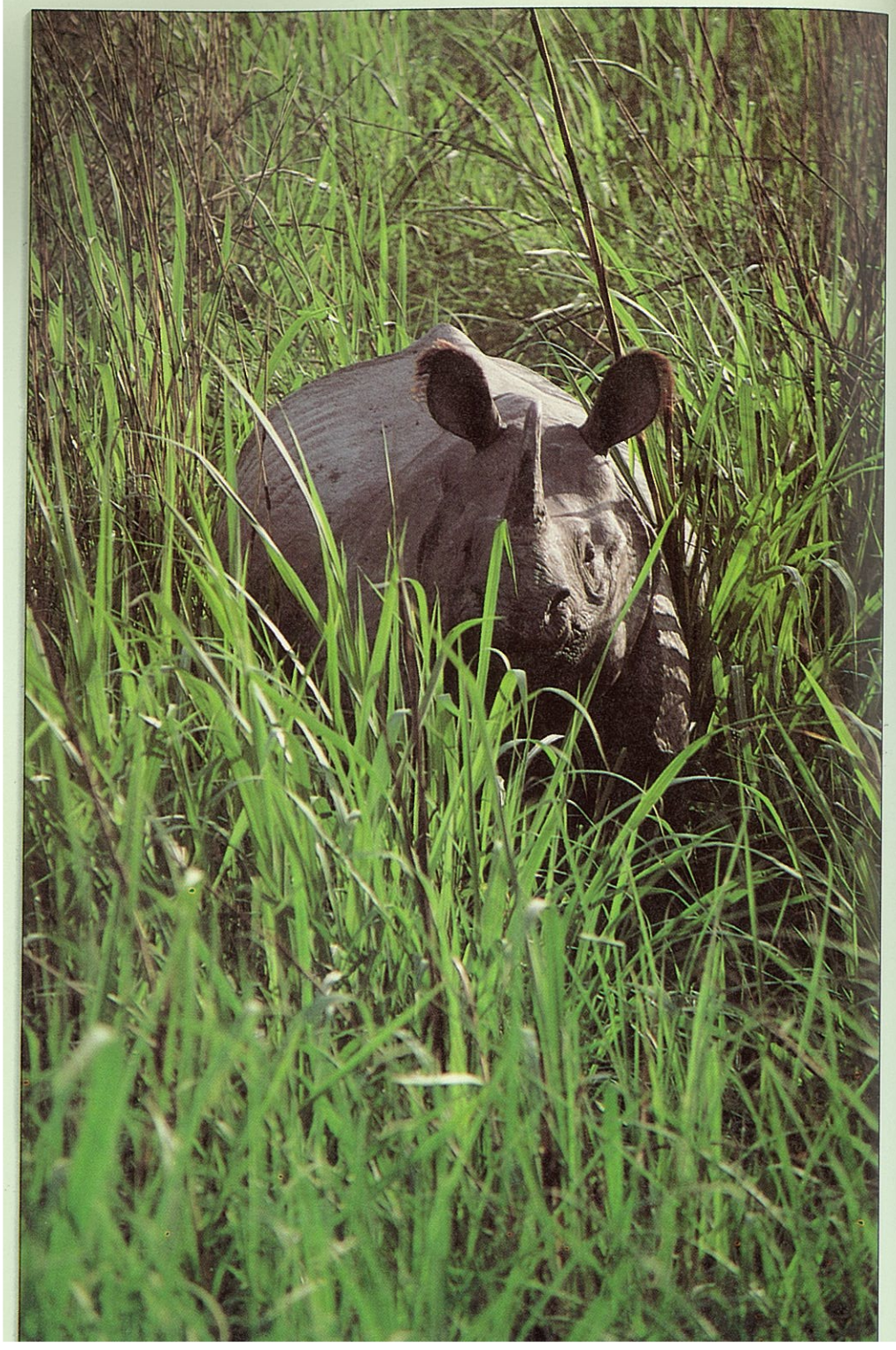


THE INDIAN RHINOCEROS

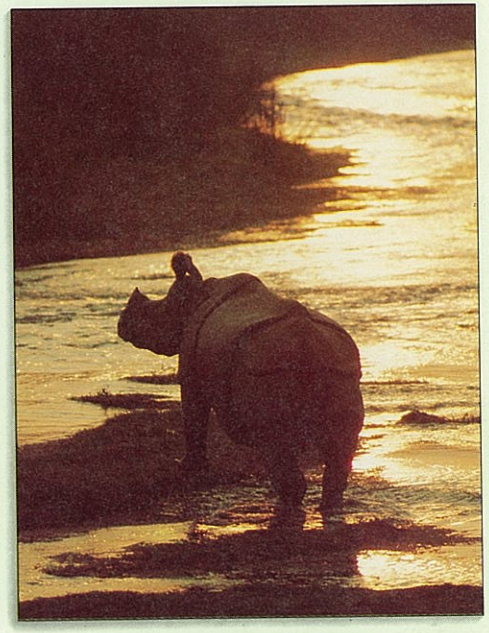
One misty morning in Chitwan National Park, southern Nepal, a magnificent male rhinoceros feeds nonchalantly in a lake. Occasionally, he submerges almost completely as he grazes on aquatic plants on the lake bottom. Suddenly, he pricks up his ears, perhaps on hearing the human intruder. He rushes out of the water grunting angrily, and disappears into the tall grass. Such a sight can now be seen in only a few other places on the Indian subcontinent, mainly in Kaziranga in the eastern Indian state of Assam. Small numbers of rhinos still survive in some other areas also.

Only a few hundred years ago the Indian rhinoceros (*Rhinoceros unicornis*) ranged over all of the grassy floodplains of the Indus, Ganga and Brahmaputra rivers. Mongol invader Timur, during his conquest of Delhi in 1398, and later, Babur, the founder of the Mughal empire in India in 1526, hunted rhinos in northern India. But the rhino's habitat was also suitable for human settlement, and was gradually turned into farmland. By the turn of the 20th Century the Indian rhino was fast heading towards extinction.

Because of excessive hunting for sport and poaching, by 1908 such prime rhino habitats as Kaziranga in Assam had only a dozen or so rhino left. It was only when hunting was stopped and immediate protection afforded to the area that the rhino showed signs of recovery. Kaziranga was declared a game sanctuary in 1926 and renamed Wildlife Sanctuary in the late 1940s. In 1950 Chitwan in Nepal had the largest concentration of this animal anywhere, with 800 to 1000. But, again, as a result of indiscriminate deforestation and poaching during the next 20 years their numbers fell to about 100 at the close of the 1960s. Chitwan was declared a Rhinoceros Sanctuary in 1962 and gazetted a National Park in 1973, but the killing of the rhinos in the park stopped only in 1976, when a contingent of the Nepalese Army was entrusted with the task of combating poaching. The rhino has since staged a comeback, and there are now about 1200 in Kaziranga and 400 in Chitwan, with about 100 in a half dozen other areas.

Appearance: With its deeply folded thick skin, studded with rivet-like tubercles on the shoulders, flanks and hindquarters, the Indian rhino appears armor-plated, which even sparked off myths that it was bullet-proof. Its massive build, its peculiar hide, its short stumpy legs, its huge head and the horn (actually a mass of densely matted hair) on the top of its snout, gives one the impression of a truly prehistoric beast. Which is not far from the truth as the rhinoceros has changed little in the last million years.

The Indian rhino averages about 5.5 feet (1.6 meters) at the shoulder and weighs 4000 lb (1820 kg). Gray in color they look jet black when wet, but may appear whitish, or whatever the color of the wallow, once the mud dries on their skin. Adult males may be differentiated from the



females by their larger size, their more pronounced skin folds on the neck, their genitals being visible from behind, and by horns that are usually thicker at the base and often broken or split at the tip (the horn of the female is usually slender and unbroken). The horn averages eight inches (20 cm) in length, but may be longer. Adult females may also be recognized by the presence of their accompanying calves.

To a casual observer, all rhinos look alike, but to a naturalist, a nick in the ear, a scar on the flank, a notch in the fold or a split in the horn is a definite mark of each beast.

Other Rhinos: Altogether there are five species of rhinos, two in Africa and three in Asia. African rhinos, both the **black** (*Diceros bicornis*) and the

Left and right, the Indian rhinoceros is now confined to a few parks in Assam, West Bengal,

horns, set one behind the other. The **Sumatran rhino** (*Didermocerus sumatrensis*) has two smaller horns, often thick stubs. The **Javan rhino** (*Rhinoceros sondaicus*), like the Indian species, has a single horn, usually less than six inches (15 cm) long. Both the Sumatran and Javan rhinos roamed eastern India until the end of the 19th Century, but have since disappeared.

Habitat: Floodplain grassland interspersed with marsh, swamp and lake, and the adjoining riverine forest, are the favored habitat of the Indian rhino. They prefer to feed on short grasses and seek shelter in thick stands of tall grass, sometimes 20–25 feet (six–eight meters) high.

Although largely grazers, Indian rhinos will also browse leaves from shrubs and trees and, when near farms, will supplement their diet with crops which they habitually raid at night. They

are fond of water and will spend hours wallowing. Besides cooling their huge bodies, the swamps and lakes also provide them with nourishing food in the form of aquatic plants.

Behavior: Rhinos occasionally feed and wallow in scattered groups of up to 10 or so, but they are solitary by nature and normally confine their movements to a small area of 0.3 to two sq miles (0.75 to five sq km). This, therefore, is their home range which meets most of their requirements of food, water and shelter. Males may have to wander farther for mates.

When two rhinos meet, ritualized behavior, a series of displays and postures, involving curling of lips and baring of sharp tushes, accompanied by snarls and grunts, usually decides who is

only physical battle will settle the dispute. These fights are noisy, and sometimes lengthy affairs, and can lead to serious injury; in rare instances, losers are mortally wounded. The horn is not their chief instrument of attack; their razor sharp tushes are, which can cut an opponent's hide without difficulty.

Male rhinos become sexually mature at about 10 years old, females a few years earlier. During courtship, violent encounters between the male and the female usually ensue and after much noisy chasing of the female by the male, mating finally takes place. Mating takes long, for up to an hour or more, the female sometimes dragging the male about, while still mounted.

After a gestation period of 16 to 16½ months, a calf (exceptionally two) is born. At birth they are pink and weigh about 130 lbs (60 kg). The mother and the calf will stay together for three to four years. Meantime, the mother will probably have mated again and be ready to produce another young. Rhinos live for up to 50 years.

Rhinos usually avoid humans, but anyone straying too close to one, cornering one, or threatening a mother with calf, had better watch out. It will usually warn an intruder with an angry snort, but sometimes it will charge, occasionally without any provocation. Human casualties from rhino attack are not uncommon. Most charges are displays of threat, stopping short of the target, but a rhino will, on occasion,

The rhinoceros calf is dependent on its mother for

press home its attack.

Signs: Rhinos leave distinct three-toed spoor on the ground, squarish in shape but not quite as large as those of the elephant. From constant use a large network of rhino trails is formed in the grassland, often forming "tunnels" through the thick grass. They also have favorite rubbing posts: a low overhanging branch, a sloping tree trunk or a stump. From regular rubbing, a distinct smooth patch is left, often coated in mud.

In rhino country, large piles of dung, known as middens, are common. These are accumulations from months, even years of use. The dung pile probably serves to inform other rhinos about an individual using a particular area. In the past poachers used to take advantage of this habit of the rhino to hunt them. They would either dig and conceal a pit on the approach path to the dung pile, or they would lie in wait for them in a nearby tree and dispatch them with a muzzle-loader gun.

Myth, Medicine, Masculinity: Rhinos have long been regarded as magical beasts surrounded by strange myths, and early Europeans have confused them for the fabled unicorn. In fact, for hundreds of years, until the late 18th Century, rhino horn was imported into Europe as unicorn horn and used as a potent drug. In medieval Asia, cups were carved out of rhino horn — often with exquisite designs on them — in the belief that the liquid in such a cup would froth, or that the cup itself would split in two, if the liquid contained a poison, thus warning and saving the life of the intending drinker.

The medicinal value of rhino horn is recognized even today and smart modern pharmacies in the East proudly display medicines containing rhino horn and other rhino products, as cures for numerous ailments, notably as a fever-depressant. Contrary to popular belief in the West, the Chinese do not use rhino horn as an aphrodisiac; only some Indians do. In Nepal it has no medicinal significance but a bowl made of rhino horn (or hide) is used to offer libations during the Hindu memorial ceremony of *shraddha*. And were it not for the incredible value placed upon this protuberance, the rhino's future would perhaps have been more secure.

Whether or not the horn has the ability to cure disease and enhance sexual capacity is a matter of debate but it does fetch good money. Indian rhino horn is considered the best and a pound (0.45 kg) of it may be worth US$9,000 in Bangkok or Mandalay, although the primary poacher gets only a small percentage of its eventual price. However, he still makes more than if he were to toil on the land for one to three years. Because of desperate poverty, ignorance and unemployment, the poacher finds it worth his while to take risks, although, if prosecuted, he resort to subterfuge and have tried to hoodwink the Hong Kong dealer with rhino horn look-alikes made out of bamboo roots!

In India and Nepal, every part of a rhino is used: skin, horn, hooves, flesh, bone, penis, the internal organs and even blood, urine and dung. They are believed to cure diseases, ward off evil spirits, reduce labor pains, bring good luck, ensure good harvest, improve health and, above all, one's sex life! No part of a rhino is waste. So, when a dead rhino is found, its horn (if there), hooves and skin are taken into government custody and the local people rush to the carcass with gusto. In no time all is gone. To those who do not understand conservation, a rhino is more useful dead than alive. Apart from satisfying their medicinal and superstitious needs when dead, live rhinos are a menace to their farms and a threat to their lives and livelihoods.

The Future: In terms of increasing rhino numbers, Kaziranga and Chitwan may be viewed as successes. But this has also increased the conflict between rhino and man. Rhinos, like elephants, have no natural predator other than man—although calves are sometimes eaten by tigers—and with continued protection their numbers are likely to exceed the natural carrying capacity of the parks. This will have to be carefully monitored by the park managements.

Biologically speaking, the more rhinos the better, but socio-economically, it is counter-productive to antagonize the farmer as his support is vital for the long term future of the rhino and other wildlife. Already crop damage by rhinos is considerable; very chronic in some areas. In Chitwan a rhino fence (consisting of a deep pit) in the Sauraha area met with limited success. Fencing off national parks and reserves sounds good theoretically but has practical limitations. Putting up heavy-duty fences on the floodplains will not only be very expensive but will also involve constant repairs.

Political disturbances in Assam slackened park vigilance in Kaziranga for some years and over a hundred rhinos were poached in the first half of the 1980s. In Chitwan, however, because of stringent protection, rhino poaching in the park is almost nonexistent.

Although the future of the Indian rhino now seems secure, it is still a matter for anxiety that this rare and endangered creature should be confined to so few habitats. To place the eggs in more baskets, so to speak, a few rhinos from Assam were released in Dudhwa National Park in Uttar Pradesh in 1984 and a few more were brought in from Chitwan a year later. In early 1986 a few rhinos from Chitwan were released in Bardia, in far west Nepal. These translocation projects are an insurance against the possibility of random extinctions. Only time will tell how the