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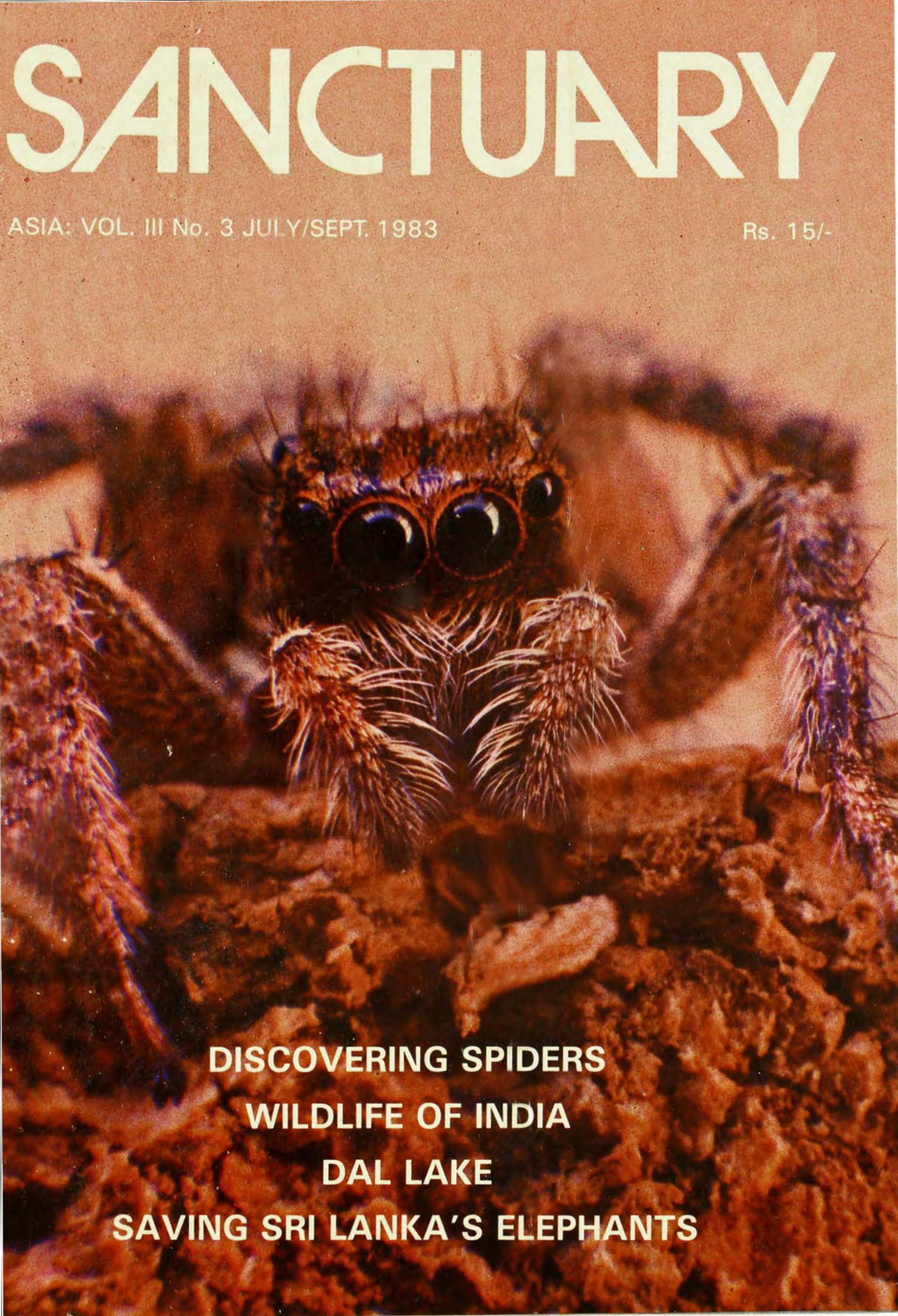

DISCOVERING SPIDERS

WILDLIFE OF INDIA

DAL LAKE

SAVING SRI LANKA'S ELEPHANTS

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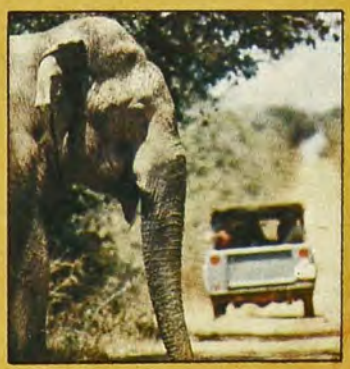


THE WILDLIFE OF INDIA

Glimpses of the past... Visions for the future.

Text by Ramesh Bedi
Photographs by Rajesh Bedi

For years the argument has raged: why talk of saving animals in a country where people are dying? The answer, though not obvious, was always there for any perceptive person to see. Animals are by far the most accurate indicators of the health of forests, which in turn are as critical to the survival of distant farmers as they are to wildlife. Our knowledge of the highly intricate process of natural regeneration is so elementary as to be virtually non-existent and there is no way for us to monitor the ecology of wild places with man-made instruments.

Saving wild animals, therefore, ceases to be an act of kindness and becomes one of survival.

CENTURIES AGO

Three hundred years before Christ, Kautilya, the Prime Minister of Pataliputra, wrote in his treatise the *Arthashastra*, "it is forbidden to cut trees, bamboo, cane and grass; to pluck leaves, to cut firewood, to burn wood for making coal; to remove the hide and to collect the bones of animals." These activities, he realised, would create havoc in the normal lives of animals and thus disturb the balance of Nature. Emperor Ashok had banned hunting in the third century B.C. In 242 B.C., in the fifth edict of the Ashok pillar, the Emperor engraved the names of those birds and animals which should be strictly protected and also specified that the burning of forests was prohibited. Our modern day concept of national parks and sanctuaries must enliven this very spirit of kindness to all creatures. The seeds of a survival plan for mankind are to be found in the Vedas and the working patterns have been well defined in the *Arthashastra*.

For a few ounces of perfume and a lot of money, callous traders are encouraging the musk deer **(facing page)** to be hunted to extinction. Organised blood sports **(above)** were introduced to India by foreign invaders. In ancient India the large-scale slaughter of wildlife was virtually unheard of.

Our *rishis* of yesteryear had an uncanny understanding of wild animals and discovered the means to bring man to live in harmony with them. A *yajnya* (national fair) called the *Ashva medhayajnya* was performed in the Vedic period when wild and domestic animals from all over India were exhibited. Mammoths, like elephants and rhinoceroses, carnivores like tigers and leopards, herbivores like chital and nilgai, semi-aquatic animals like crocodiles and tortoises and innumerable birds and insects were on display. A total of 609 creatures were brought to this *yajnya*—their names and physical characteristics are described in the twenty-fourth chapter of the *Yajurveda*. At the closing of this national animal fair all the wild animals were set free in the jungle. No harm was allowed to come to any creature and the conservation of Nature was an integral part of the human life-style in our country. History records several places where hunting, or the infliction of any kind of torment towards animals was prohibited. Protection of wild animals was often a religious duty and jungles were known as *dharmaranyas* or sanctuaries.

Nature has been extremely generous with our country. Bubbling rivers, tranquil lakes, seas of unfathomable depths, white peaked mountains and dense forests—all the attractive gifts of nature—we have them. This natural splendour has given rise to a large number of mammals, birds and reptiles. Entomologists have identified over thirty thousand species of insects and the number of fish in our rivers and seas is beyond count.

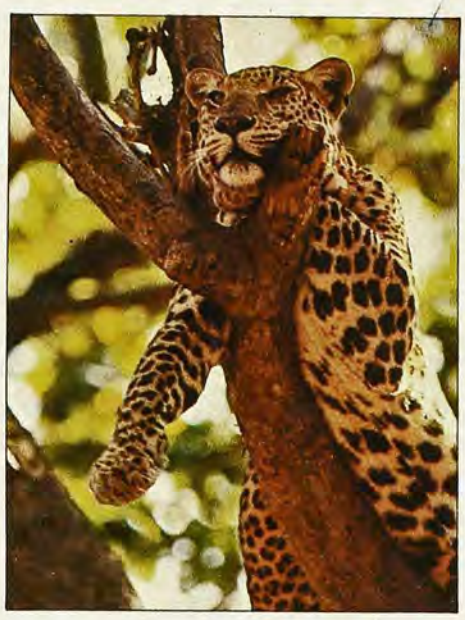
Till recently, this vital canvas of life throbbed in tune with Nature's ways. Alas, the ascent of man in the past few centuries pitted him against the ancient system. The evolution of man's mind seems to have led him towards a path of confrontation with Nature. In ancient India, however, the wholesale massacre of wildlife was unknown. It was with the advent of armed invaders, who eventually became our rulers, that blood sports became established as symbols of strength, virility and power. When the British took over, shikar became even more firmly established as a much sought after pleasure. For less privileged Indians the plight of wild animals was lost in the euphoria of freedom. Almost every available gun owned by civilian and military men alike, was turned towards helpless animals in an orgy of violence unleashed in the guise of exercising the 'free Indian's' long denied right to hunt. Herds of black buck were machine-gunned. Elephants were slaughtered for ivory. Tigers were specially singled out as they had been elevated to the position of royal game and each gun owner wished to experience the royal pleasure of shooting down the 'ferocious' beasts. For five years the carnage continued and the scars are evident even today. Almost no species escaped unscathed for while big game was shot, the lesser life forms also suffered on account of mindless habitat destruction. Public lands were parcelled off without considering ecological implications. Forests were razed, hillslopes were denuded.

In 1952 an Animal Welfare Board was constituted and soon national parks and sanctuaries, for the protection and conservation of our savaged flora and fauna, began to dot the landscape. The network spread from Kashmir to Kanyakumari and

even further to the Andaman and Nicobar Islands. Three decades later, in 1982, we have around 250 national parks and sanctuaries with a collective area of over 75,000 sq. km. Expressed as a percentage of our country's total geographical area, however, this amounts to a mere 2.3 per cent, as against an expert committee's recommendation of a bare minimum of four per cent. Though we appear to have discovered a way—by identifying specific tracts to preserve and protect—we seem to lack the necessary will to execute and follow our plans through. The result is that even after granting legal protection to our forests and animals the basic business of implementing such laudable objectives is depressingly unfulfilled. The beneficiaries of such inaction are wood and animal poachers, and those businessmen whose covetous eyes invariably fall on our undefended forest wealth. Exploitation has gone unchecked for so long now that even indexing the loss of species has become a mammoth exercise. Yet, the onslaught progresses ceaselessly, and still more birds, animals, reptiles and plants are pushed towards the point of no return. The time has come for us to rediscover the wisdom of our ancient peers and to remember that safeguarding the future of wild animals does not imply their imprisonment in zoos. They need wide open spaces, the good health of which should be left in the hands of Nature. Here man need merely play the secondary role of protector, to ensure that other men do not misuse the bounty that is sure to ensue. This co-existence with other life forms that share our planet is the aim of conservation.

THE YEARS TO COME

Man's limited knowledge of Nature's intricate ways precludes any ambitious attempts towards highly elaborate 'management plans' for the survival of the thousands of threatened life forms in existence today. A more feasible course could be to identify as many animals as we can at the apex of food chains and concentrate on providing them with viable habitats. This way the lesser life forms, on which the larger animals are so dependent, would automatically adjust to all available niches. Those severely threatened species which are in imminent danger of extinction should, of course, receive our ministrations without delay. After *very* careful study we might also be justified in attempting to reintroduce certain species which have historically been known to thrive in specific areas. In this category, a strong case could be made for the cheetah. The fact that the Moghul emperor Akbar, had a stable of over 1,000 cheetahs is ample evidence of the animal's super abundance in the forests of his time. After careful habitat management, to ensure the availability of prey species, states like Madhya Pradesh or Uttar Pradesh could certainly provide us with opportunities for cheetah re-introduction projects.

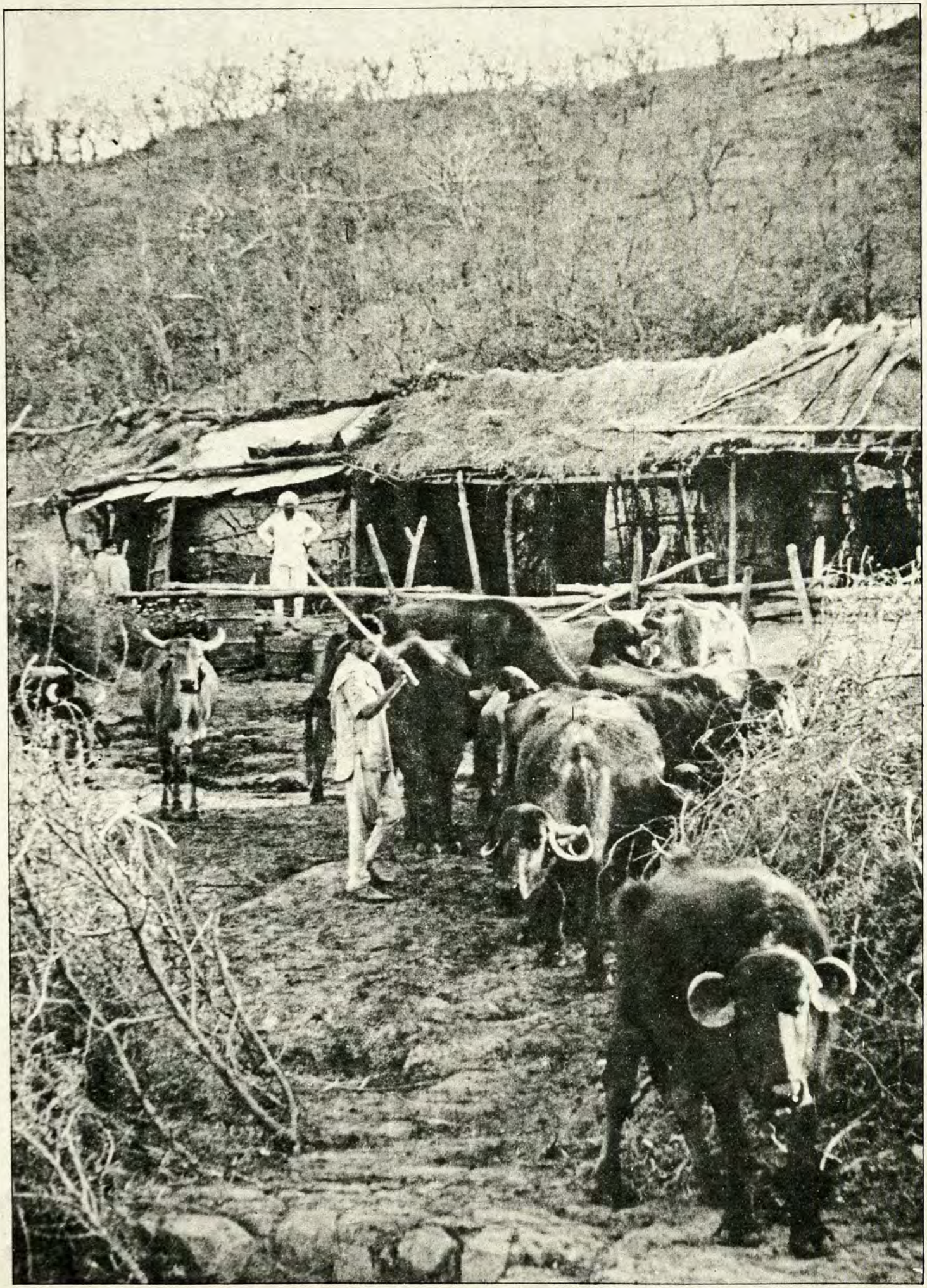


Winsome and frolicsome, the otter **(facing page)** can be seen in several rivers of India. Otters are hunted for their pelts and some fishermen mistakenly believe they are responsible for their depleted catch. In fact, these aquatic mammals play a very vital role in the ecology of fresh water habitats. As a result of better adaptability, the leopard **(above)** has been able to survive in many forest belts where tigers have died out.

The core of our future efforts must and will, however, lie in the protection of the biomes that support animals such as the tiger, elephant, lion and rhino. The following thumb-nail sketches may serve to provide some idea of the status of such animals and their habitats in India today. In addition, the skeletal information on some of our more immediately endangered species highlights the delicate predicament of our mute friends on whom, as we constantly keep discovering, we are as dependent as they are on us.

The censured king of the jungle

No other animal has been so affronted by man as the king of the jungle—the lion. There was a time when it commanded the respect owing to our national animal, but not so any longer. Hardly any of the rules laid out for the *abhayaranayas* (forests free from fear) by Kautilya in the third century B.C. are in force today. In the Gir forest, the last bastion of the Asiatic lion, cultivators and cattle breeders have encroached into nearly one-third of the forest, and fields are still being extended deep into the interior. To facilitate the harvesting of cash crops such as peanuts and sugarcane, new roads have been constructed. The habitat of the lions has therefore not just shrunk, (less than a hundred years ago the lions roamed an



Thousands of domestic cattle owned by maldharis, compete for fodder with wild ungulates in the heart of the Gir National Park.

area three times greater than the present one) it has also been degraded. Domestic cattle belonging to the *maldharis* (cattle breeders) living inside the sanctuary, create problems for the nilgai, chital and other prey species which face stiff competition for fodder. Deer, once the natural prey for the lion, are thus slowly being eased out by domestic stock. As the *maldharis* are not always adequately compensated for their losses, the lions are often not allowed to eat the cattle they kill. On discovering a kill, the *maldharis* drive the lions away allowing Harijans to take charge of the dead animal. The latter remove the skin and collect the meat and bones for sale, after which vultures, leopards, hyenas and mongoose join in plundering the lion's kill. The cats are thus able to consume less than twenty-five per cent of the animals killed by them. This obviously leads to more frequent kills and the confrontation between man and beast becomes further aggravated.

Sometimes, in despair, the lions have even been poisoned by locals. In early 1971 we photographed a lioness named Garib, accompanied by her two cubs, four kilometres beyond the Sasan Gir rest house. When we went back to Gir later the same year, we were informed that a *maldhari* had poisoned Garib and her cubs as a calf had been killed by the mother. To obliterate any evidence of the crime, Garib and the cubs were burnt! And what were the consequences of this heinous act? The culprit was let off by the court as no one was prepared to bear witness against him. There is no doubt that such crimes are being committed in other sanctuaries and protected forests as well.

Much needs to be done to put lions back on the map. They will need to be rehabilitated in other regions for a start. In 1957, seventy kilometres from Varanasi, an unsuccessful attempt was made to introduce lions at the Chandra Prabha Sanctuary. We should not be disheartened that the project failed, but should instead learn from the mistakes that we committed earlier. Habitat improvement and protection could certainly return the once proud predators to a measure of their previous strength, but do we have the requisite will and determination to follow our plans through?

"One astrologer of questionable repute informed the maharaja of Mysore that he would have a son only after he had shot seventy-five tigers. By the time the prince was eighteen months old, one hundred and three tigers had paid for the birth of one human child."

The traumatised tiger

A part of the traditional hospitality of the maharajas of the pre-Independence states was to invite important guests to a tiger hunt. Some of the records read like butchers' lists. A 'brave' maharaja killed six hundred and sixteen tigers during his lifetime. Another despatched three hundred and seventy in thirty-six years, from 1871 to 1907. Colonel Kesari Singh who was in charge of the hunting departments of Gwalior and Jaipur states killed nearly two hundred tigers within a span of twenty-three years while organising the demise of another thousand at the hands of other shikaris. Maharaja Sir Madho Rao of Gwalior hunted nearly eight hundred tigers and another brave soul had the dubious distinction of killing ten tigers in five days in 1862 on the shores of the Tapti river. Lord Harding and a train of British luminaires were no less ardent in their enthusiasm and they vied with each other to establish who was the most efficient tiger killer of all. The most exciting moment in the hunting career of Colonel V.K. Berne, for instance, was when he shot three tigers in one minute! The trigger-happy party of Kramp had the temerity to boast of killing five tigers in five seconds in Pahadgadh, Rajasthan. What chance would any animal have had in the face of such insane brutality? Even mystics seemed determined to fan the flames of destruction and one astrologer of questionable repute informed the maharaja of Mysore that he would have a son only after he had shot seventy-five tigers. By the time the prince was eighteen months old, one hundred and three tigers had paid for the birth of one human child. There was no social stigma attached to this type of carnage as the law in those days permitted it. And there is, of course, no account of the killings undertaken for skins by poachers; nor of that by villagers who would poison entire families of tigers to protect their livestock.

Since 1972 the tiger has become our national animal. Both

private and government organisations are even now committed to spending crores of rupees to return tiger populations to sustainable levels. In truth, the price for past follies is being paid in coin today. Not that our current record is unblemished. What the stalwarts of yesteryear did with guns, we continue to do with plough shares, tractors and axes.

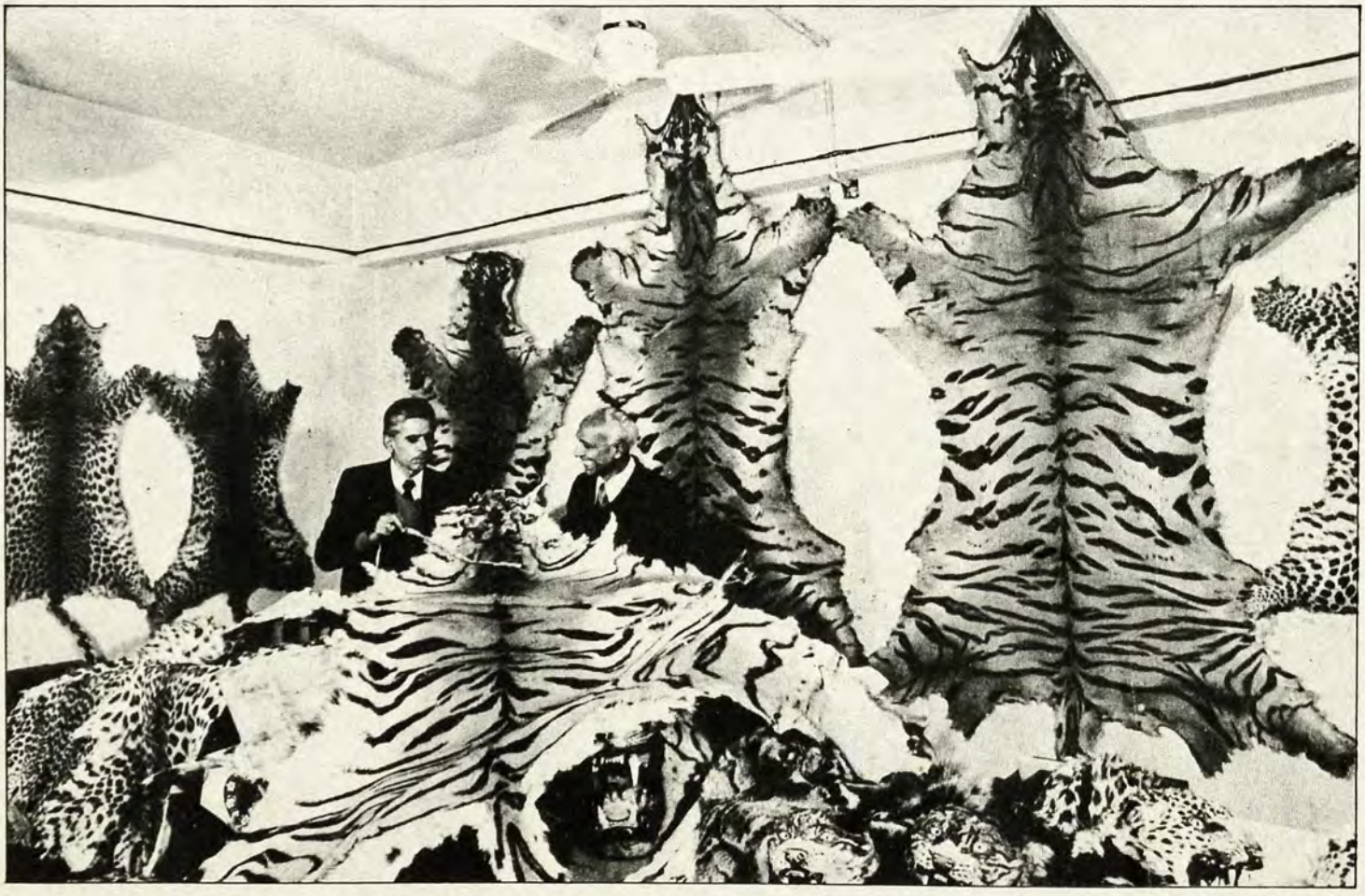
After World War II, vast portions of our forests were cleared for the speedy development of industrial establishments, irrigation and electric projects. Large forested areas were also cut to provide agricultural land for a burgeoning population and to rehabilitate refugees. When India gained Independence nearly thirty-three per cent of the land was clothed with forests; today the ratio is down to twenty-two per cent with some of the best tiger and wildlife habitats having disappeared. These valuable tracts were ostensibly razed for the prosperity of human beings at the cost of tigers and other wildlife. In real terms, however, all we brought upon ourselves was land degradation, floods and droughts in an inevitable sequence of events that requires little explanation, as the adverse chain reaction is now well understood by almost everyone. Today, hardly any forest areas are unexploited by man. Marking, felling, sawing and loading of wood and timber; cutting of bamboo, cane and grass; collection of leaves, gums and herbs; lopping of branches to feed livestock, grazing of cattle—all such activities continue unabated. The land is slowly dying.

In the summer of 1982, my two sons Naresh and Rajesh and I went to the forests beyond the Ganga in Hardwar to shoot a film for the British Broadcasting Corporation. Each day our cameras recorded over a hundred men and women carrying bundles of fuel wood on their heads to sell in city markets. Scenes like that cause despair. In the early thirties I often trekked through hill forests to observe wildlife. I would relish the wild fruit that grew in abundance there and would bask in the serenity. When I compare those pristine forests with the ravaged tracts I see today my heart sinks. Entire areas have been transformed. Energy is no doubt a major problem for villagers and small town dwellers, but our planners must quickly awaken from their reverie, for if this indiscriminate hacking of forests goes on unchecked for too long, even village kitchen fires are bound to die out.

The great Indian bustard **(facing page)** has become the symbol of conservation efforts in many parts of India. Like the tiger **(above)**, this magnificent ground bird has been saved from the brink of extinction.

A solitary animal like the tiger cannot possibly adjust to such multi-faceted disturbances which shatter the tranquillity of forests. Aberrancy is a direct result and enquiries have shown that an overwhelming majority of man/animal conflicts occur when frightened animals are confronted with unthinking humans. Sugarcane fields, for instance, have sprung up around many jungles and tigresses often prefer to deliver their cubs in such crop lands before they are harvested. Villagers who stumble upon such families often try to drive the cats away, armed with nothing more than a few sticks and stones. Retaliation by the protective mother is a foregone conclusion and the resultant loss of human life does little to foster 'understanding' for tiger conservation in the minds of an affected populace. Assuming that villagers may not be farsighted enough to recognise the potential danger of planting crops that afford cover to predators like the tiger, is it not reasonable to expect our district administrators to display sufficient foresight? Sugarcane must not be planted within a certain safe distance from known tiger habitats. Instead, other cash crops which allow less cover should be encouraged.

The Central government's well-known Project Tiger, started over ten years ago, aims to redress this situation. The eleven original Reserves are now to be expanded to fifteen as per the decision taken by the Steering Commission in 1982. In these protected forests the objectives are fairly straightforward. Protect the habitat. Stop or minimise human activities. Suspend commercial exploitation of forest produce. The Project authorities believe that Nature is its own best manager. There were 268 tigers in the nine



Innocent, trusting and peaceful—a tiger **(above)** takes a mud bath near a jungle path. Tigers and several other Indian wild animals **(below)** are still ruthlessly butchered to adorn (?) the walls of insensitive people. The author (standing on the right) and senior wildlife inspector S.L. Nagarath, inspect a hoard of 89 skins seized in New Delhi.

Reserves in 1972 when the project was launched. In 1979 there were 711 tigers in eleven Reserves. The number became 757 in 1982. With more Reserves to be added we can expect the figure to show a still greater rise in future. The census figures of other animals in tiger reserves show equally encouraging trends. Leopards for instance, have benefited greatly from the dramatic increase in the populations of such prey species as langur, chital, wild fowl, etc. If anything, Project Tiger has demonstrated beyond doubt Nature's remarkable capacity to regenerate as jungle communities thrive in partnerships of mutual convenience.

A downhill slide for the snow leopard

It is difficult to say which particular member of the cat family is the most handsome. There is however, no doubt that the snow leopard features high on the list. This dignified and attractive animal is found in the higher reaches of the Himalayas and trans-Himalayan ranges extending from Ladakh to Bhutan. Unfortunately, the snow leopard's thick bushy fur, which serves it so well in its snowbound home, attracts murderous eyes. Well-heeled ladies, insensitive to the cat's endangered status, pay up to thirty thousand rupees for a snow leopard coat. I have seen the furs of adults and cubs sold in shops in Leh and Kashmir.

By nature the animals are trusting and mild and no recorded instance of an attack on humans has ever been verified in all these years. In its natural habitat the snow leopard hunts hare, wild sheep, goat and the musk deer, occasionally, picking off domestic animals too. The grey phantom's future is extremely bleak and the cat faces sure extinction unless the conscience of the people is aroused. No doubt enlightenment is slowly creeping into the minds of more and more individuals. But what good is such concern if, as actually happened, the courts take six years to prosecute a man caught red-handed with over two hundred animal skins, of which nearly fifty belonged to the list of protected species? Eventually on December 26, 1982, the man in question was fined (two thousand rupees) and imprisoned for just a year. A small price to pay for the fortune he must have earned from the sale of the pelts. He will certainly return to his grizzly business when he is free.

The Border Security Force can play an important role in the protection of the snow leopard, musk deer, ibex, Tibetan wild ass and a host of other wild animals in the mountains. But they must be sufficiently motivated and clearly instructed. Meanwhile, high society ladies who buy expensive furs should realise that they are directly responsible for the decline of one of the world's most exquisite felines. Perhaps someone should point out to them that "furs are worn by beautiful animals and ugly people."

"Today the demand for musk in Asia, Europe and America exceeds 2,500 kg. annually. To meet this demand the deer are slaughtered in unconceivably large numbers and their extinction therefore is imminent."

The sweet smell of death

"If a hunter is caught killing a musk deer his hands should be chopped off and he should be nailed to the entrance door of the *gompa*." This was the edict issued by the Tibetan lamas, who had to formulate such strong laws to save the musk deer from extinction.

Near the navel of this small deer exists a small gland that secretes musk which man has been using for centuries in the preparation of perfumes and medicines of dubious aphrodisiac qualities. Today the demand for musk in Asia, Europe and America exceeds 2,500 kg. annually. To meet this demand the deer are slaughtered in unconceivably large numbers and their extinction therefore is imminent. Unfortunately, principles, sentiments and good sense are quickly set aside when money talks. To save the musk deer, what is required is extremely severe deterrent punishment coupled with armed policing of its known habitats. The musk extract after all, is sold at the astronomical rate of $40,000 to $60,000 per kg. in the international market and poachers will take extraordinary risks to obtain animals from the wild.

Musk deer are found in the Himalayas in India, Bhutan,

Nepal and Tibet and I have seen them feeding alongside yaks at a height of 2,050 to 3,660 metres while I was conducting research for the Health Ministry in the sixties. I had then submitted a project to establish a musk deer farm which envisaged the harvesting of musk from captive animals without endangering their lives in any way. Repeated extraction or 'milking' has no untoward effect on the health of the deer and is obviously the answer to catering to the world market. But avarice and greed really do appear to be insurmountable problems. The point is that such farms would naturally be a part of the organised sector and would leave the all powerful anti-social elements like poachers and the illegal traders somewhat in the lurch. Till a solution is found, however, I smell nothing but disaster for this delicate mountain deer.

The thamin, going, going...

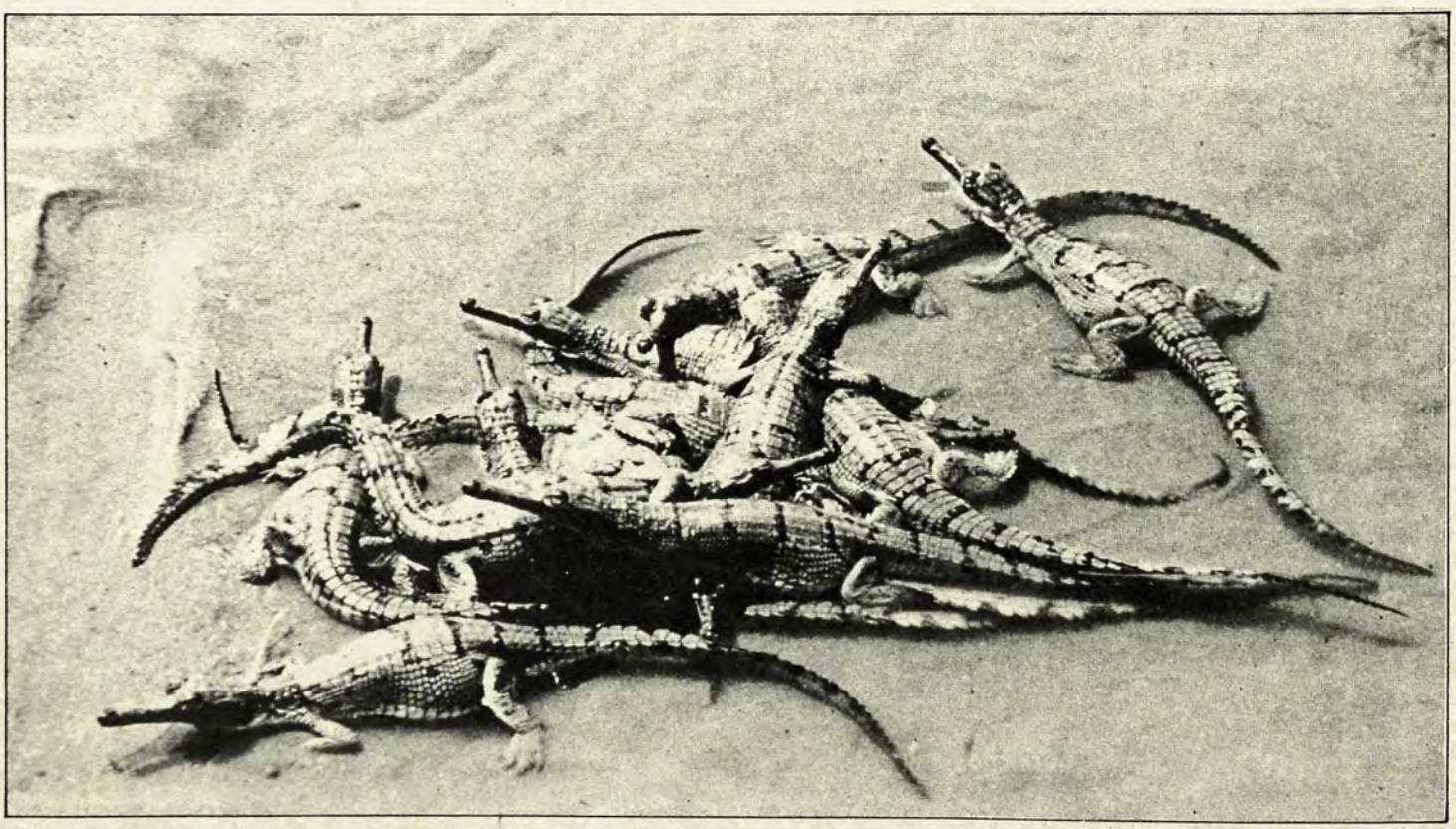
In a lake in Manipur there is a floating island which has been formed by marshy soil consisting of humus and dead vegetation. The thickness of the floating cushion varies between 25 and 150 cm. The total area of twenty-five square km. is known as Keibul Lamjao National Park. Reeds and grasses which grow up to five metres help in creating ideal conditions for the survival of the *sangai* the world's rarest wild deer. *Sangai,* which in the local language means "a being who looks at you", is commonly referred to as the brow-antlered deer, Manipur deer and thamin. In 1951 it was officially considered extinct. Later it was discovered that some specimens were still alive on this remote floating island and a survey conducted in 1979 confirmed that a total of thirty thamins were alive. Today their mini-home is virtually under seige from people living around the park. Fortunately for us this deer shows signs of multiplying in captivity as, despite massive conservation efforts, they will almost certainly be extinct in the wild by the turn of this century.

The King Cobra or Hamadryad **(facing page)**, the largest poisonous snake, fears virtually no enemy. Yet, experts have confirmed, it will quietly move away from man rather than attack him, unless of course the reptile feels threatened or alarmed, or its escape route is blocked. Walking forests! Wood poaching **(top)** is rampant all over India. **(Above)** Members of the author's film expedition were involved in the gharial egg collection project in the Chambal river.

The rhinoceros—the horns of a political dilemma

The Kaziranga National Park has been established in Assam for the conservation of the great one-horned rhinoceros. Its horn, in reality a formation of a closely matted mass of horny fibre, is wrongly presumed to possess aphrodisiac and medicinal properties. Consequently, there is a great demand for rhino horn and the huge beasts are cruelly trapped and killed. Dr. Esmond Bradely Martin conducted a trade study and in his report to the World Wildlife Fund (1981) revealed that the horns of the Assam rhinoceros are illegally traded all over the world, virtually without any constraints. The astronomical price of Rs. 62,400 per kg. which the horn fetches attracts poachers like honey does flies. And money hungry middlemen have built an efficient smuggling route to transport the horns to the West and South Asian countries where a horn can fetch as much as Rs. 1,50,000.

Despite the fact that poachers and hunters are so active, strict conservation efforts in Kaziranga and the seven sanctuaries in Assam have ensured that 1,654 rhinos still survive. The problem is that some of the forested areas reserved for them are not large enough to sustain the increasing populations. Territorial aggression is a natural corollary to shrinking habitats and I have personally seen several badly wounded rhinos in Kaziranga. Obviously, the jungles of Assam, which are under severe pressure from people living around them, are not sufficient. The government of India had, in fact, decided to locate a second home for them in the Dudhwa National Park. I went to see the proposed home of the rhinos in 1981 and again in 1982 and found the habitat and conditions ideal for their translocation. Arrangements to rehabilitate the animals were made, but unfortunately politics crept in. The Assamese refuse to permit the shifting of rhinos from Assam as they feel (wrongly) that this will terminate their 'monopoly' and that their tourist trade will then be diverted to Dudhwa.



The thamin or brow-antlered deer of Manipur **(top)**, faces an extremely uncertain future, however, for the present, gharials **(above)** have been successfully saved from extinction.

As a naturalist I know that rhinos were once found in the *terai* region of Uttar Pradesh. The last rhino of this region was killed near Pilibhit at the beginning of this century. As an animal lover, I sincerely hope that the Assamese students and government, keep in view the welfare of the rhinoceros and exhibit a more expansive mind. The good sense in relocating the rhinos, as a sort of insurance for the survival of the species, should be obvious to all.

Proper habitat management of the *terai* region would also enable naturalists to consolidate the future of two extremely rare and endangered animals which currently seem destined for extinction. The hispid hare (*Caprolagus hispidus*), which is reportedly found only in limited forested tracts in Assam, could possibly be rehabilitated in the Lakhimpur Kheri area. Similarly the pygmy hog (*Sus salvanius*) which was believed to be extinct till as late as 1960, could establish itself in the *terai* forests if we release sufficient numbers into the wild after establishing organised breeding centres for the animals in the Manas Sanctuary.

Volumes could be written on "The Wildlife of India". What is needed at this moment is for us to convert our concern into conservation action. There are many ways in which we could contribute our individual talents towards the cause. Though my sons and I are, for instance, involved primarily in photography, we felt that while filming the life of gharials in the Chambal river, we could also play an active role in conserving the endangered reptiles.

Consequently, we spent months studying the factors leading to nest selection by gharials. We also expended much energy and time in trying to understand the female's role in aiding her nestlings to emerge into a hostile world after incubation had been completed. Most of the research and photography was conducted 'on site', on the banks of the Chambal river as it wound its way through Uttar Pradesh, Rajasthan and Madhya Pradesh. Deep ravines and tales of dacoits did cause anxiety on some occasions, but the satisfaction of recording on film, such awe inspiring sequences as a female gharial digging her nest and placing her eggs in it in the dead of night were more than worth the effort. We were also able to contribute something to the vast fund of knowledge of zoology when we filmed a female opening up her nest, again at night, to facilitate her fully-formed embryos to make their first adventurous journey towards water.

"The beautiful hangul deer of Kashmir has been saved as has the barasingha of Kanha. The tiger and its co-denizens, many of them highly endangered, have a distinctly brighter future ahead of them."

In 1978, organisations like the Zoological Survey in India and the United Nations' Food and Agriculture Organisations had projected that there were no more than 300 gharials left in their natural habitats. By locating nests, to obtain eggs for incubation centres, the survival chances of the young reptiles have been greatly enhanced. In these centres, eggs are incubated and the young are looked after till they reach a desirable length, after which they are released into their wild river habitats. Such restocking of wild populations has brought gharials back from the brink of extinction.

In retrospect, when I see the post-Independence years and compare them to the present decade, I feel that the welfare of wildlife is now being well-looked after and the results of our efforts are already visible. The beautiful hangul deer of Kashmir has been saved as has the barasingha of Kanha. The tiger and its co-denizens, many of them highly endangered, have a distinctly brighter future ahead of them, thanks to wildlife management techniques. I am optimistic about the prospects of our wildlife and forests but would emphasise the need for continuous monitoring of the ecological health of our country. Simultaneously, more material on crucial subjects such as ecology and wildlife is needed. Students and young people should be drawn towards conservation and facilities for visiting wild places need to be improved so that such individuals can see first hand the fruits of their efforts. Though the task ahead of us is massive, we should remain undaunted, for the first steps towards a viable conservation programme have already proven to be successful.