

Wild Life of Lower Bengal with particular reference to the Sundarbans

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THE term, Lower Bengal, coined in the early days of the East India Company, signified the present day Orissa, and such parts of the pre-partition Bengal and the present day Bihar as lay to the south of the Sub-Himalayan tract, and the term was in common use till the end of the 19th century. Over this area, where communication was comparatively less difficult, and society more developed, the British East India Company following in the footsteps of the Portuguese and the French, first spread their trade activities. Prosperity got an impetus, though greatly impeded by a total lack of security as evidenced by the frequent raids of the marauding Mahrattas under Bhaskar Pundit, of the Portuguese and Mugh pirates from their hideouts in the coastal belt, and by the operation of the Thugs along the main lines of land communication, and an upsurge of population began in a small way. An increasing demand for land and for firewood thus developed, setting in motion a shrinkage of the areas under forest, and a consequent reduction of wild life. Before the days of Nawab Serajuddaula in the early part of the 18th century, the region of Plassey south of Murshidabad was covered with forest, and provided a hunting ground for the nobility of Murshidabad, who approached the area by river. Exactly what kinds of fauna abounded in this forest is nowhere recorded, and all that we know is that *deer*, inclusive perhaps of *antelopes*, were hunted. By 1757, when the battle of Plassey was fought, mango groves and open stretches had appeared in this area, and all that one sees to-day is open fields with some *Ficus* and *Babul* trees sporadically scattered. Of wild life, there are however, two survivors that have stood the challenge of time, and occur in small numbers. These are the *hare* and the *partridge*. The reasons for their survival are their small size, great

tenacity under trying conditions, and an amazing power of concealment.

Roundabout 1950 I knew a very knowledgeable man who had his home in a village in the Kanthi Subdivision of Midnapore district. He had a very good memory inspite of his 75 years, and he told me that in the early part of the present century a coastal belt of forest ran from the mouth of the Hooghly to the Balasore district of Orissa with some interruptions, and parties of railway officials from Kharagpore used to come regularly to hunt *deer* and *pigs* in that belt. Tigers, I was informed, visited this forest a few times from across the Subarnarekha. There is nothing now even to suggest that a forest once stood in this area except perhaps 2 or 3 small patches of *Sal* in the vicinity of Ramnagar. The ugly *hyaena* has, however, taken on the functions of the tiger as a periodical visitor from Orissa, and it finds concealment in day time among the prickly bushes of *Pandanus*, sown along the coast.

Across the Hooghly lies the enormous tidal forest of the Sundarbans, the home of the *royal Bengal Tiger*. Upto the middle of the 19th century it stretched eastward along the coast from the Hooghly to the Feni river, and had at that time an estimated area of 10,000 sq. miles. The area under forest gradually shrank from reclamation, which first started in the eastern end lying across the Baleswar river in the districts of Barisal and Noakhali, and reclamation was almost complete in this part at the turn of the century. An uncle of mine—one of the earliest members of the Indian Civil Service—had shot a *wild buffalo* in the Barisal Sundarbans about the year 1890. It is known that *wild buffaloes* existed at one time throughout the Sundarbans, but when they were completely exterminated, is not now ascertainable.

In relation to wild life the tidal swamp of the Sundarbans, stretched across a vast area mainly in the Gangetic delta, is an amazing tract. Between the rivers which flow from north to south, the saline mud flats are criss-crossed by numberless creeks, which serve as the outlet of the water which inundates the flats during spring tides. The trees are mangroves, some of which have provided for their root respiration by throwing up bayonet like pneumatophores or breathing roots, while some others have stilt roots which serve the dual purpose of support and respiration. Of the mangroves, the Sundri (*Heritiera minor*), from which the name of the forest has been derived, and which happens to be a timber tree, is naturally the most important, but keora (*Sonneratia apetala*) and Garan (*Ceriops roxburghiana*) deserve a special mention in the context of wild life.

After extensive reclamations the greater part of the residual forest in the districts of Khulna and the 24-Parganas was constituted reserve and protected forests in 1877 at the instance of Sir Richard Temple, the Lieutenant Governor of Bengal. At the time of partition of Bengal in 1947, the total area under forest, constituting a single forest division, was roughly 4000 sq. miles, and of this, about 2400 sq. miles in the district of Khulna has since gone to East Pakistan. What is narrated in the few succeeding paragraphs relates however, to the Undivided Sundarbans of which the author happened to be the last Divisional Forest Officer.

No sweet water exists in this vast tidal swamp and the fauna having to subsist on salt or brackish water, is very selective. Other than the marsh crocodile (*Crocodylus porosus*) and a small number of species for which the habitat is natural, only such species occur as possess a power of adaptability varying from moderate to great. Besides, a pre-requisite to survival in this area for all terrestrial animals is an ability to swim fast to escape from crocodiles, sharks and the like.

The barking deer (*Muntiacus muntjak*), whose natural distribution ranges from about 7000 ft. altitude of our part of the Himalayas to certain parts of the tidal swamp in the eastern Sundarbans, where the water is only mildly brackish, provides a good example of the former, while the tiger (*panthera tigris tigris*) and the wild pig (*Sus cristatus*), both of which seem to be as

happy in the intensely saline part of the western Sundarbans as at about 8000 ft. altitude on the Sikkim Himalayas, and in the dry and hot parts of India, provide a good example of the latter.

There are no antelopes, and of the deer tribe there are the chital (*Axis axis*) and the barking deer, the former being the commonest land animal. The distribution of the barking deer, locally known as Kukoor Harin, is very limited, being restricted to certain islands in the Shella and Passar rivers in the eastern Sundarbans, which carry down a fair quantity of sweet water, and help to reduce the degree of salinity. Like that of all other land animals, the density of chital distribution is naturally regulated by the degree of salinity of water in the rivers and in the creeks. It is the highest in the east, which is now in Pakistan, and the lowest in the west near the Matla. The stags carry poor heads, and at the close of the rutting season, which occurs in May-June, they start shedding their antlers. Till early January the stags are generally in velvet. Fodder grasses being absent, the deer derive their sustenance mainly from the leaves, twigs and fruits of keora mentioned earlier, and from various leaves and fruits deposited on the bank by receding tides. Keora being more plentiful near the sea, one sees more deer here than away from it. It is interesting to watch herds of the deer follow troupes of rhesus monkey (*Macaca mulatta*) from one keora grove to another and pick up what the monkeys drop from tree tops in course of their feeding. In attaching themselves to monkeys, the deer have an added advantage in that the former act as very alert sentinels where the stealthy approach of a tiger is concerned, and send warning calls from their position of vantage. Unfortunately poachers sometimes take advantage of such behaviour of the chital, and attract the deer by mimicing the chirping of the rhesus monkey from a concealed position on tree-top.

The Garan, mentioned earlier, is a small tree forming tangled masses, impenetrable to man. The brakes of Garan, which are usually extensive, harbour sounders of wild pigs just as tall grass and reeds do in the sub-himalayan tract. The pig, whose rate of multiplication is very high, constitutes the principal food item of the tiger, the second being the chital deer. As in the case of the chital, there are more pigs in the eastern Sundarbans than in the west.



PLATE 48. Beehive in the Mangrove Forests.



PLATE 49. Honey Collectors with a forest guard.

The Javan rhinoceros (*Rhinoceros sondaicus*) roamed the Sundarbans forest at one time, and a creek called Ganra Khal* exists to this day in the Eastern Sundarbans. While checking old records in the Sundarbans Divisional Office at Khulna as an Assistant Conservator in 1928, I came upon a piece of information which, at that time, did not appear to me of any great importance, and I marked the file for destruction. The information was, as I remember it now, that a rhinoceros was killed in about year 1888. After that year, no further mention of rhinoceros attracted my notice in course of the random percentage check.

Of the *Felidae*, there are tigers, and leopard cats (*Felis bengalensis*), but no leopards. The Sundarbans tigers have been hereditary man-eaters for ages: exactly how long, no one can say. They have learnt the habits and ways of man exceedingly well, and have developed a great deal of cunning. The heaviest toll is taken of honey collectors, who roam the thick *garan* brakes in summer in small bands in search of combs, and grow somewhat careless after some days of the danger lurking on their flanks, and in the rear. Invariably, victims are caught unawares. Under the Sundarbans conditions the recording of casualties has been poor even in recent times, and it must have been poorer in the olden days when the area was much larger, with no means of either fast or frequent communication with headquarters. Such statistics as are available in this regard, and particularly those that relate to the 19th century may, therefore, be taken as understatements. An idea of casualties on either side in the undivided Sundarbans may be had from the following figures.

Year	No. of men carried away	No. of tigers killed or trapped
1881-82	161	3
1883-84	168	8
1907-08	120	9
1911-12	112	61
1914-15	79	36
1915-16	60	33

Some of the Sundarbans tigers become so very fearless from the repeated lifting of man that they do not hesitate to board small boats at night, and to climb stilt huts erected by wood cutters on the bank of rivers. In this context

* Ganra khal literally means *Rhinoceros* creek.

an extract from Trafford's report of 1909-10 will be illuminating. It runs as below: "Man-eating tigers were more aggressive in the Sundarbans this year than they have ever been known to be previously. An alarming feature in two different coupes was the climbing by tigers into sleeping shelters built on machans, and the seizure of one of the inmates on each occasion. The further development of this new propensity however, was fortunately arrested as both these tigers succumbed to the temptation of traps in which they were caught and shot. This aggressiveness is attributed to the fact that enormous numbers of deer were killed or drowned in the storm wave which accompanied the cyclone of October, 1909, which upset the balance between tigers and their natural prey, and induced them to attack men."

A question is sometimes asked as to what deters the tiger, which is a devil to reckon with in the Sundarbans jungle, from carrying out its depredations in the adjacent reclaimed areas with equal audacity. The answer is that the tiger, like most other animals including ourselves, is a slave of habits and practices, and while he would not hesitate to attack a country-boat or a stilt-hut within the forested area as generations of tigers have done before him, he instinctively shrinks from launching upon an adventure of swimming across a boundary river to hunt in an unknown domain devoid of any cover. In other parts of the country, where the jungle area is fairly small or where there exist cultivations in enclaves within the jungle, the tiger gets an urge to step across the border and explore the cleared areas outside. With the development of familiarity in the gradual course this becomes a habit, and he extends his hunting ground. But here in the Sundarbans the forested area is immense with no enclaves of cultivation anywhere, and there has therefore, never been any good and sufficient cause for the tiger to leave what he believes to be his homeland, and venture out into the open domain of man in search of prey. There was thus no occasion for him to develop a habit in that direction. I have however, known a few stray cases where a tiger crossed over to the cultivation under the cover of darkness, and killed cattle, but these were of the nature of a limited adventure, the extent of penetration being small, and besides, such cases are by no means common.

Driven by hunger, the Sundarbans tiger is known to catch and eat fish in creeks, and once a tiger completely ate up a large *python* I had shot, by the time I returned to the spot with men to carry it. Incidentally, that *python* had swallowed a *hitil* stag entire with antlers measuring 16" and 18".

Of poisonous land snakes, there are the *black cobra* (*Naja Naja*), the *king Cobra* (*Nija hannah*), and the *green whip-snake* (*Dryophis mycterizans*). The black cobra is quite common, and notwithstanding all the publicity against it, I am in a position to affirm that under ordinary circumstances it is definitely not aggressive, and will move out of the way if given a chance. Had it not done so, I would have been dead so many times over. The king cobra is not a myth, but it is by no means common. I have seen them and I had occasion to kill two. The distribution of the whip-snake is localized and where it occurs, it is fairly common, and seen clinging to the tips of small trees, absolutely motionless. It usually strikes on the arms or on the trunk, and its bite causes a weeping ulcer, and some elevation of temperature. It belongs to the tribe, *Opisthoglypha*, the rear-fanged snakes, and its venom is not lethal.

Of the *lesser lizards*, there are three that deserve mention. One is the much-maligned, but really harmless *gecko* (*vern: Takkhak*) which, contrary to common belief, carries no poison. The second is *Varanus salvator* (*Vern: Ramgadi*), while the third is *Varanus flavescens* (*Vern: Sonagadi*), which come under the group name of *monitor lizards*. The two latter are harmless to man, and even more, they play a beneficial role by eating up the eggs of snakes and crocodiles. All the same, they are hunted for their skins, which make beautiful shoes and hand-bags for the fair sex.

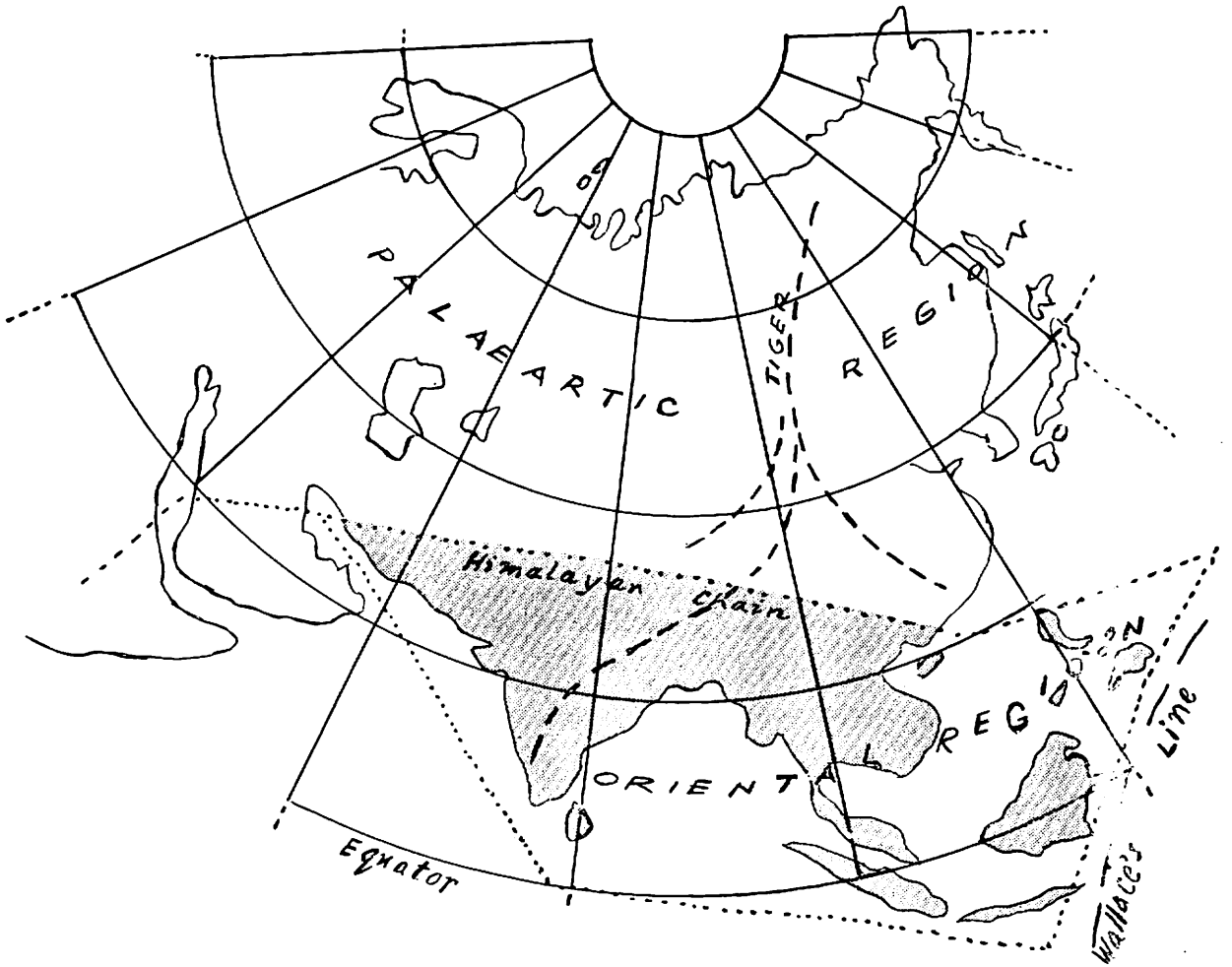
The single species of crocodile that occurs—the marsh crocodile or *Crocodylus porosus*—is one of the largest in the world, and is reputed for its ferocity. In the matter of size and strength it can be a challenger to *Crocodylus intermedius* of the Orinoco river basin in Venezuela. The female is known to grow up to 26 feet although I have never shot anything larger than 22 feet. The male seldom grows beyond 12 feet. Eggs are laid on the ground near the dead ends of creeks in large nests made with

green vegetable matter, mainly bracken, and the largest number of eggs I have counted in one nest was 72. I have on occasions, found newly hatched young of the crocodile in the stomach of the *bhetki* fish.

This much-dreaded *crocodile* of the Sundarbans plays havoc on all kinds of land animals, sometimes even on the tiger, when during a cyclonic storm or an exceptionally strong tidal bore, the low land is submerged under several feet of water, and the animals float about helplessly. It can swim very fast on the surface, and there once was an occasion when only after a full miles's chase by a steam-launch forging ahead at full speed that I could come just within shooting range of a crocodile swimming away with a woman across its mouth.

Of migratory birds, *curlews*, *teals* *ducks* and occasionally *geese* visit the Sundarbans during the winter. Of resident birds, *ibis*, *king-fishers*, *adjutants*, *storks*, *egrets*, *cranes*, *fishing-eagles*, and *night-herons* are worthy of mention. *Pelicans* started coming and nesting in the bird colony at Sajnakhali near Basanti in the western Sundarbans some 4 years ago. *Jungle-fowl* occur in certain parts in small numbers, but these are the product of the red jungle-fowl breeding with the pariah strain of domesticated fowl, a large number of which are released in the jungle by wood-cutters each year to appease the sylvan deity. As if to strike a symmetry, a nesting colony of birds occurs in the eastern Sundarbans on the left bank of the Supoti river. In both the colonies the largest number of birds is seen during the period, April to June.

The rock bee (*Apis dorsata*) has a pride of place especially in the western Sundarbans during the period, April to September, when many bee flowers bloom, and thousands of swarms converge from various directions. It is an extraordinary phenomenon that these swarms, which would invariably build their combs high up on tall, smooth-barked trees in other jungles, do so here only a few feet above ground as the photograph would show, and low *garan* jungle is usually preferred. This is because the bees know that the *bear*, the *mongoose* and the *civet*—their arch enemies—are not here, and they need not therefore go higher up to escape them. Besides, the tangled masses of the low *Garán* jungle give them a measure of protection against the darting onslaught of predatory birds.



MAP 14 Paths of Tiger migration.

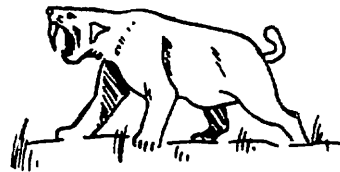


PLATE 50. Sabre-toothed tiger now extinct (Sketch).

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