# AN ACCOUNT OF THE MAMMALIAN FAUNA OF GORUMARA NATIONAL PARK, JALPAIGURI, WEST BENGAL.

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### INTRODUCTION

Gorumara National Park (Plate 1A), covering an area of about 70 sq. km, is situated in the Sub-Himalayan Terai region of Jalpaiguri district. West Bengal, India. The park is about 104 km East from Siliguri and can be approached through Sevok Road via Odlabari and Chalsa. From Chalsa, it is only 14 km on way to Lataguri. In connection with the Environment Impact Assessment studies of the Teesta Barrage **Project** and the ecological studies on the Malayan Giant Squirrel, present authors surveyed the Park during April, 1994, August 1994, February 1995 and August 1995. The core area of the Park (Plate 1B) contains dense mixed forest with thick undergrowth and is mainly composed of large tree species like Sal (Shorea robusta), Teak (Tectona grandis), Simul (Bombax malabaricum), Lali (Amoora wallichii), Lasuni (Dysoxylum sp.) Sisso (Delbergia sisso), Udal (Sterculia villosa), Khair (Acacia catechu), Tatari (Dillenia pentagyna), Bat (Ficus benglensis), Terminalia balarica, etc. Different species of Orchids and Ferns are also found here. Apart from the dense tree forest, vast stretches of grassland consisting of different species of elephant grasses such as Hudda, Nal. Urudi, Malsa etc., provide totally different ecological conditions sustaining rich faunal diversity. Another interesting grass species of the park is Citronella which adds fragnance of Citrus fruit to the air almost throughout the year. A number of perennial rivers like Jaldhaka, Murti, Garatijhora, Indong and their tributaries serve as the water sources of the Park.

Dense forest as well as well as the array of animal life of Gorumara National Park is very much impressive. So far, about 210 species of birds have been recorded from here by the West Bengal State Forest Department. However, no comprehensive list of the mammalian species of the Park is available. In the present paper, an attempt has been made to provide a checklist of the mammalian species based on authors' observations as well as on reports of the State Forest Department. In the account, species marked with \* and \*\* are included in the Schedule I and Schedule II of the Indian Wildlife (protection) Act, 1972, respectively. SYSTEMATIC ACCOUNT Class : MAMMALIA Order : INSECTIVORA Family : SORICIDAE

1. Suncus murinus (Linnaeus)

Common names : House Shrew (Eng.); Chucho (Beng.); Chhuchunder (Hin.).

*Remarks* Very common, particularly near the Forest Rest House and nearby localities.

## 2. Suncus etruscus Savi

Common name : Pygmy Shrew (Eng.).

Remarks: Not very common. Lives under litter in forest.

## Order : PRIMATES

Family : CERCOPITHECIDAE

## 3. Macaca mulatta mulatta (Zimmermann) \*\*

Common names: Rhesus Macaque (Eng.); Markat, Bandar (Beng.); Bandar (Hin.).

*Remarks*: Most common in the Forest. At least six troops comprising 10 of to 40 animals were observed.

## 4. Presbytis entellus entellus (Dufresne) \*\*

Common names : Hanuman Langur (Eng.); Hanuman (Beng.); Langur (Hin.). Remarks ; Rare. Appears to be casual visitor of the Park.

# Order : CHIROPTERA Family : PTEROPODIDAE

## 5. Rousettus leschenaulti leschenaulti (Desmarest)

Common names : Indian Fulvous Fruit Bat (Eng.); Chalta Badur (Beng.).

Remarks: Rare.

## 6. Pteropus giganteus giganteus (Brünnich)

Common names : Indian Flying Fox (Eng.); Badur (Beng.).

**Remarks**: No roost was observed in the Park, but quite a large number of them Visit the fruiting trees in the night, almost throughout the year. Roosts containing more than 100 animals were noticed in bamboo thickets and Tamarind trees of the neighbouring villages and the tea gardens.

### 7. Cynoperus sphinx sphinx (Vahl)

Common names: Short-nosed Fruit Bat (Eng.); Kala Badur (Beng.).

*Remarks* : Most common. Regularly visits the fruiting trees near Forest Rest House Campus in large numbers.

Family: RHINOLOPHIDAE

## 8. Hipposideros lankadiva Kelaart

Common name : Sri Lankan Gigantic Leaf-nosed Bat (Eng.).

*Remarks* : No roost was observed. Few specimens used to visit the Varandah of the Forest Rest House at midnight during February, probably for resting a short while.

# Family : VESPERTILIONIDAE 9. Pipistrellus mimus Wroughton

Common names : Indian Pygmy Pipistrelle (Eng.); Chamchika (Beng.).

*Remarks*: Very common, come out of the roosts during dusk and could be seen flying in the open areas of the forest, particularly over the rivers and swamps.

## 10. Scotophilus heathi heathi (Horsfield)

Common name : Greater yellow Bat (Eng.).

*Remarks*: Very common. Roosts of 10-20 animals observed in almost all the houses near the Park, as well as in the rest house campus. It comes out of the roost one by one just after the dusk and can easily be seen flying among the trees.

Order : CARNIVORA Family : CANIDAE

## 11. Vulpes bengalensis (Shaw) \*\*

Common names ; Bengal Fox (Eng.) ; Khek-siyal (Beng.) ; Lomri (Hin.).

*Remarks* : Fairly common and can easily be met within the forest roads after evening.

## Family : MUSTELIDAE

## 12. Lutra perspicillata Geoffroy \*\*

Common names : Smooth-coated Indian Otter (Eng.); Ud, Bhondar (Beng.); Udbilao (Hin.).

Remarks; Moderately common. Two packs, one of 4, other of 6 animals were observed in the grassland near river banks during August, 1995.

### Family : VIVERRIDAE

### 13. Viverricula indica indica (Desmarest) \*\*

Common names : Small Indian Civet (Eng.); Gandhagokul (Beng.); Khatus (Hin.).

*Remarks*: Common. Forage in the trees as well as in the ground. Observed both in the deep forest and also in the tea gardens of fringe areas. Scats matters revealed mostly vegetative substances.

### 14. Paradoxurus hermaphroditus (Pallas) \*\*

Common names : Common Palm Civet, Toddy Cat (Eng.); Baghda, Bham (Beng.) Khatus (Hin.).

*Remarks*: Could not be observed in the proper core area. However, they are fairly common in the fringe areas adjacent to localities, causing considerable damage to the poultry. They have also been reported to enter in the store and kitchen rooms.

## 15. Herpestes auropunctatus (Hodgson)

Common names : Small Indian Mongoose (Eng.); Beji, Neul (Beng.); Neula (Hin.).

*Remarks* : Diurnal and frequently met in the scruby fringe areas of the forest.

## 16. Herpestes edwardsi nyula (Hodgson)

Common names : Indian grey Mongoose (Eng.); Beji, Neul (Beng.); Neula (Hin.).

*Remarks* : Diurnal, live in family packs, making burrows along the bush-covered ditch or nullah.

## Family : FELIDAE

## 17. Felis chaus Güldenstaedt \*\*

Common names : Jungle Cat (Eng.); Ban Beral (Beng.); Jangli billi (Hin.).

*Remarks*: Not observed in the Park proper, but have been reported as common in the villages of the fringe areas causing damage to the poultry.

## 18. Felis bengalensis Kerr \*

Common names : Leopard Cat (Eng.); Ban Biral (Beng.); Chita billi (Hin.).

Remarks : Rare, observed only once near a nullah.

## 19. Panthera pardus (Linnaeus) \*

Commons names : Common Indian Leopard (Eng.); Chitabagh (Beng.); Tenduwa (Hin.).

*Remarks* : No specimen, but pugmarks were observed along the river banks. As many as 15-16 leopards have been reported by the Forest Department staff in the Park.

## 20. Panthera tigris Linnaeus \*

Common names : Tiger (Eng.); Bagh (Beng., Hin.).

*Remarks*: A couple of tiger have been reported, but during our visits neither the specimen nor the pugmarks could be observed.

Order : PHOLIDOTA Family : MANIDAE

## 21. Manis crassicaudata Gray \*

Common names: Pangolin (Eng.); Bajra kit, Bon rui (Beng.); Bajra kapta, Silu, Sala (Hin.).

*Remarks*: According to Forest department and local people's reports Pangolin occurs in the forest. However, we could not observe any specimen and it appears to be very rare. A young of Indian Pangolin has been released in the Park by the Forest Department.

# Order : PROBOSCIDEA Family : ELEPHANTIDAE

### 22. Elephas maximus Linnaeus \*

Common names : Indian Elephant (Eng.); Hasti, Hathi (Beng.); Hanthi (Hin.).

**Remarks:** Area serves as permanent abode for a herd of about 20 elephants and a solitary bull tusker. Moreover, the Park is used as corridor for many more elephants during migration. During February, a wild bull regularly chased the tame elephant in the campus of Forest Rest House.

# Order : PERISSODACTYLA

## Family: RHINOCEROTIDAE

## 23. Rhinoceros unicornis Linnaeus \*

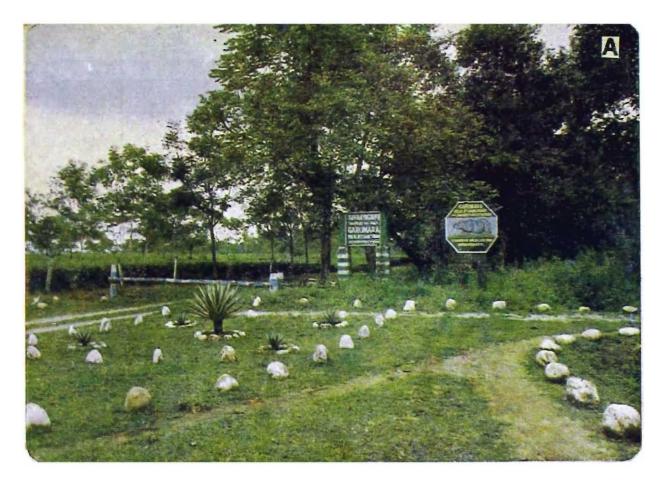
Common names : Great Indian One horned Rhinoceros (Eng.); Gandar (Beng.); Gainda (Hin.).

Remarks: Apart from Jaldapara, Gorumara is the only other area in West Bengal where One-horned Rhinoceros is still surviving. In Gorumara, number of Rhino is estimated as 16 including a new born one. This unique animal can easily be observed in the morning and dusk from the observation spot, during their visit to salt pit. Recently one Rhino from Kaziranga National Park of Assam has been translocated here for genetic improvement of the Stock (Plate 1B). Straying of individual Rhino from the Park is also often reported.

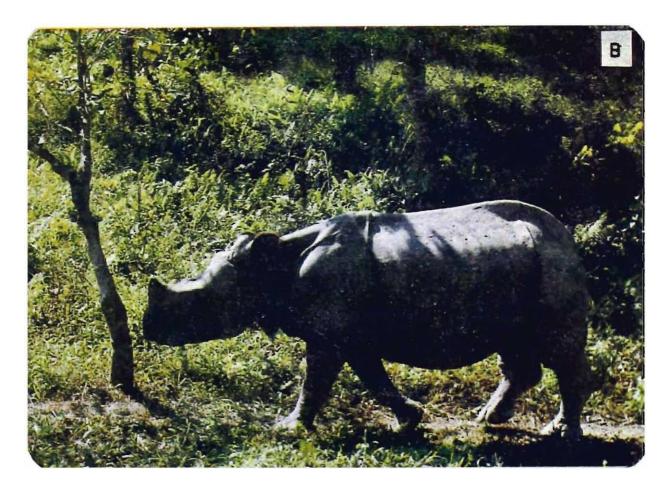
# Order : ARTIODACTYLA Family : SUIDAE 24. Sus scrofa cristatus Wagner

Common names : Indian Wild Boar (Eng.); Buno suor (Beng.); Suar (Hin.).

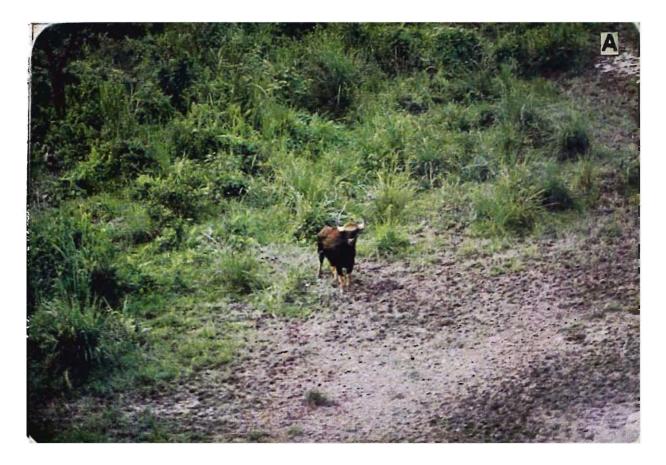
*Remarks*: Fairly common. Observed in the grass jungle as well as in tree forest. Living in herds of variable size.



A. Gateway of Gorumara National Park.



B. Introduced specimen of Rhinoceros unicornis.



A. A specimen of Bos gaurus in the grassland.



B. Ratufa bicolor gigantea in the Gorumara National Park.

## 25. Sus salvanius (Hodgson) \*

Common name : Pygmy Hog (Eng.).

*Remarks*: One of the most endangered species of Indian Mammals. It has been reported from Gorumara by the Forest Department. However, we could not get any evidence of its occurrence in the Park.

## Family : CERVIDAE 26. Cervus unicolor Kerr

Comman names : Sambar (Eng., Beng., Hin.);

*Remarks*: Rare, Observed only on two occasions in the grassland. On both the occasions the animal was seen foraging.

### 27. Axis porcinus Zimmermann

Common names : Hog deer (Eng.); Para (Beng.).

*Remarks*: Rare, none could be seen during the visits.

#### 28. Muntiacus muntjak vaginalis (Boddaert)

Common names : Indian Muntjak, Barking deer (Eng.); Kakhar, Kukoo (Beng., Hin.).

*Remarks* : Rare. Only one animal could be noticed during August, 95.

## Family : BOVIDAE

# 29. Bos gaurus Smith \*

Common names : Indian Bison (Eng.) ; Gaur (Beng.) ; Gaur, Janglee Gai (Hin.).

Remarks: Fairly common. Herds of 10-20 animals, including calves, can regularly

be seen during elephant ride in the tree forest as well as grassland. Gaur also frequently visits the salt pit (Plate 2A).

# Order : LAGOMORPHA Family : LEPORIDAE

## 30. Lepus nigricollis Cuvier

Common names : Rufous-tailed Hare (Eng.) ; Khargosh (Beng., Hin.).

*Remarks*: Most common in the grassland. It appears that there is some hunting pressure on this species in areas adjacent to the Park.

Order : RODENTIA Family : SCIURIDAE 31. Petaurista sp. \*\*

Common name : Flying Squirrel (Eng.).

*Remarks*: Flying Squirrels are fairly common in the tree forest and could easily be marked during their gliding at night. Their characteristic calls can also be heard in the jungle at night.

From the observed size difference during gliding, it appears that at least two species of flying squirrels occur in the Gorumara.

## 32. Tamiops macclellandi (Horsfield)

Common name : Himalayan Striped Squirrel (Eng.).

*Remarks*: Only a pair was observed in a Sisso tree at about 9-00 A. M. in February. So far, within West Bengal, this species is known to occur in Darjeeling district. Further survey may reveal a well-established population of this species in the Park.

## 33. Callosciurus pygerythrus lokroides (Hodgson)

Common name : Hoary-bellied Himalayan Squirrel (Eng.).

*Remark*: Common. Feeds mainly on the lower branches of the trees. Occasionally comes to the ground for passing to the other trees.

## 34. Ratufa bicolor gigantea (M'Clelland)\*\*

Common names : Malayan Giant Squirrel (Eng.); Baro Katbirali (Beng.)

*Remarks*: A good population of Malayan Giant Squirrel was observed in the core area. However, this squirrel frequently visits the trees at the fringe of open areas for feeding during morning and afternoon hours (Plate 2B). It can easily be marked in the trees due to loud distinctive calls and droppings of fruits, twigs, etc. It feeds mainly on the wide variety of wild seeds, fruits, flowers and leaves. Considerable amount of debarking is also made by these squirrels probably in search of insects. Nests were observed in the high, tender branches of the trees. It was not observed on the ground.

### 35. Funambalus pennanti Wroughton

Common names : Northern Palm Squirrel, Five striped Squirrel (Eng.); Kat birali (Beng.); Gilheri (Hin.).

Remarks: Not observed in the Gorumara Proper, but in the nearby villages this squirrel is fairly common.

## Family : HYSTRICIDAE

## 36. Hystrix hodgsoni (Gray)

Common names : Crestless Himalayan porcupine (Eng.); Sajaru (Beng.); Sahi (Hin.).

*Remarks*: No specimen or burrow was observed, however, quills indicating its occurrence were found.

## Family : MURIDAE

# 37. Vandeleuria oleracea dumeticola (Hodgson)

Common name : Indian Long-tailed Tree mouse (Eng.).

**Remarks**: Common. Confined mainly on the branches of small trees or in the bush. Small cup-shaped nests of dry leaves and twigs were found in the dense bush.

#### 38. Rattus rattus (Linnaeus)

Common names : House Rat (Eng.); Indur (Beng.).

**Remarks**: Common in the forest as well as adjacent localities. Observed in the forest floor and also in the trees.

### 39. Mus musculus Linnaeus

Common names : House Mouse (Eng.) ; Nengti Indur (Beng.).

Remarks: Common in and around Forest Rest House but not in the deep forest.

### 40. Mus booduga booduga (Gray)

Common names : Little Indian Field Mouse (Eng.); Nengti Indur (Beng.).

**Remarks**: Plenty, particularly in the relatively high grass land areas.

### 41. Golunda ellioti ellioti Gray

Common name : Indian Bush Rat (Eng.).

*Remarks*: A diurnal species of rat. Not very common, observed only on one occasion within the bush in a dry nullah.

## 42. Bandicota bengalensis bengalensis (Gray)

Common names : Lesser Bandicoot Rat (Eng.); Metho Indur (Beng.).

*Remarks*: Though most abundant and serious pest of crops in the entire Jalpaiguri District, but not very common in the Gorumara. During three visits only five live burrows could be noticed in the relatively open grassland.

## 43. Bandicota indica nemorivaga (Hodgson)

Common names: Large bandicoot Rat (Eng.); Dhere Indur (Beng.); Ghous (Hin.).

*Remarks*: Fairly common in the grassland particularly in the slopes of swamps and streams. Live burrows can be identified by the presence of fresh molluscan shells at the burrow mouth.

## DISCUSSION

In this account, 43 species belonging to 37 genera, 20 families and 9 orders have been reported. Out of these 43 species, 8 are included in Schedule I, and 9 in Schedule II of the Indian Wildlife (Protection) Act, 1972 and 8 species are considered as highly threatened (Z. S. I. 1994).

From our observation and according to the Forest Department, it appears that poaching and grazing, the two major problems of most of the protected areas are practically absent in the Gorumara Park. Moreover, existence of a well established population of the Malayan Giant<sup>1</sup> Squirrel indicates the favourable ecological conditions, along with the quality of forest in positive respect. More species of mammalian fauna of the Park, particularly small/medium sized nocturnal species, may be added if probing is done by trapping and netting methods. As the area of the Park is comparatively small, studies on the carrying capacity and estimate of different populations may help further for the proper management of wildlife.

### SUMMARY

Based on the survey works an account of the mammalian fauna of the Gorumara National park was given. Altogether, 43 species have been reported, of which 8 are considered as threatened. No hunting or grazing pressure was noticed in the Park. It appears that few more nocturnal species of mammals occur in the Park in addition to those reported. A detaild survey work along with the study of populations and carrying capacity was recommended.

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