Ordering the Wild: Shikar, Wildlife and Conservation in Colonial Bengal (1850 -1947)

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By
Smt. Kakoli Sinha Ray

Department of History
Jadavpur University
Kolkata, India
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Certified that the Thesis entitled:

'Ordering the Wild: Shikar, Wildlife and Conservation in Colonial Bengal (1850 -1947)' submitted by me for the award of the Degree of Doctor of Philosophy in Arts at Jadavpur University is based upon my work carried out under the Supervision of Professor Ranjan Chakrabarti. And that neither the thesis nor any part of it has been submitted before for any degree or diploma anywhere / elsewhere.

Countersigned by the
Supervisor: Prof. Ranjan Chakrabarti **Candidate: Kakoli Sinha Ray**
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Kakoli Sinha Ray.

Glossary

Agnihotra: the sacrificial fire.
Air: type of fish of the pimelodus species, scientific name, Macrones aor.
Amaltas: cassia.
Asan: type of tree, scientific name, Terminalia tomentosa.
Babul: type of tree, scientific name, Acacia arabica.
Baccha: type of fish of the pimelodus species, scientific name, Pseudoutropicus garua.
Bagair: type of fish of the pimelodus species.
Bain: an eel-shaped fish found in tanks, muddy rivers and sluggish streams, scientific name, Mastercembelus armatus.
Bakshis: rewards mostly in form of money.
Banderkula: type of tree.
Bandh: water reservoir.
Bagh: tiger in Hindi.
Banker: forest tolls.
Bans: bamboo.
Barasingha: marsh deer, scientific name, Rucervus duvaucelii.
Barind: Varendra tract is the largest Pleistocene era physiographic unit in Bangladesh and the Bengal basin. Total area is of approximately7770 sq.km. of mostly old alluvium.
Bat: banyan tree, scientific name, Ficus indica.
Batashi: type of fish.
Beckti: type of fish, scientific name, Latis calcarafer.
Bel: type of tree, scientific name, Arge marmalos.
Bheda: type of fish, scientific name, Ornandus marmoratus.
Ber: Indian plum.
Bhoot: ghost who took up residence in peepal trees.
Bil: wide marshes.
Boal: a fresh water shark, scientific name, Wallago attu.
Bora: Indian python.
Bummalo: Bombay duck.
Chaitra: in the standard Hindu calendar and the national civil calendar of India, Chaitra is the first month of the year. It is the last month in the Bengali calendar, where it is called Choitro.
Chaitya: a Buddhist shrine or prayer hall with a stupa at one end.
Chalta: elephant apple, scientific name, Dillenia indica.
Champak: type of tree, scientific name, Magnolia champaka.
Chanda: fish of carp variety.
Chaplas: type of tree, scientific name, Artocarpus chaplaslia.
Chars or churs: sand banks.
Chaulumgra: jangly almond tree, scientific name, hydnocarpus kurzii.
Checkarishi: also called Chittagong wood or mahagony, scientific name, Chikrassia tabularis.
Chela: fish of carp variety.
Cheng: type of fish, scientific name,

Chickrassi: type of tree, scientific name,
Chilaumi: type of tree, scientific name,
Chiliva: type of fish, scientific name, Aspidoparia morar.
Chincha: tamarind.
Chingri: type of crustacean, prawn.
Chars or churs: accretions.
Chital: type of deer.
Chital: type of fish, scientific name, Notepterous chilata.
Cinchona: quinine yielding plant, grown in plantations in the lower hills of Bengal in the colonial period.
Churails: ghost of wayward women.
Com: type of tree, scientific name,
Date-palms: type of tree, scientific name, Phoenix acaulis.
Deodar: type of tree, scientific name, Cedrus deodara.
Dhan: type of tree, scientific name, Anogeissus latifolia.
Dhanesh: hornbill.
Duars or Dooars: the floodplains and foothills of the Eastern Himalayas. It is synonymous with the term Terai used in North India and Nepal.
Hangar: shark.
Gadis: seat or mattress.
Gajal: type of fish.
Gals: type of tree.
Galda chingri: cray fish.
Gamhar: type of tree, scientific name, Gmelina arborea.
Gaur: Indian bison.
Gayal, Gourighai or Mithun: wild cattle, scientific name, Bos frontalis.
Gazari: bustard sal.
Geoa: type of tree found in the Sundarbans, scientific name, Exeoecaria agallocha.
Geonch: type of fish, scientific name, Bagarius yarrelli.
Gharial: gavialis or long-snouted, fish-eating crocodile, scientific name, Crocodilus gangeticus.
Gharua: type of fish.
Goddess Kali: dark goddess, some opine that its origin is pre- Aryan, especially worshipped in Bengal.
Gopika: consort of the Krishna, a Hindu God.
Gorai: type of fish, scientific name,
Gua: type of palm, scientific name, Areca catechu.
Guisap: common monitor.
Gurjan: type of tree, scientific name, Dipterocarpus turbinatus.
Guttia: type of tree, scientific name, Ceripps Rexburghiana.
Haat: weekly village market.
Hogla: type of plant, scientific name, Typha eliphantina.
Hukum: to give order in Hindi.

Howdah: canopy on top of elephants, in which the native rulers travelled or went on hunting expeditions, later adopted by the European glitterati too.
Hunqahs: tigers beaten out to open ground by natives by beating of drums and shouting to facilitate the hunting of the same by the white shikari.
Ilisha or hilsa: type of fish which comes to rivers from the sea to lay eggs, scientific name, Clupanadon hilisha..
Jam or Jamun: Indian blackberry, scientific name, Euginea jambolana.
Jarul: type of tree, scientific name, Lagerstroema flos-reginae.
Jheels: pool, marsh or lake in Urdu.
Jiyal: type of tree, scientific name, Odina wodier.
Jungle: tropical forest, used in the sense of a chaotic, uncivilised primeval forest of India.
Jungleterry region: Jangal terai in Hindi – a countryside stretching from Birbhum, Murshidabad to Monger and Bhagalpur in Bihar.
Jungly: uncivilised, uncouth.
Kai: the climbing perch, scientific name, Anabas scandens.
Kainjal: type of tree, scientific name, Terminalia paniculata.
Kalbans: type of fish, scientific name, Labeo calbani.
Kamdels: type of tree.
Kankra: crab.
Kanthal: jack, scientific name, Artocarpus integrifolia.
Karama tree: sal tree, scientific name, Shorea robusta.
Katla: type of fish of the carp family, scientific name, Catla buchanani.
Kend: type of tree, scientific name, Diospyros melanoxylon.
Kesara: red kamlaa tree or Indian rose, scientific name, Mallotus philippensis.
Khabbar: information.
Khagra: reeds.
Khair: type of tree, scientific name, Senegelia catechu.
Khal: water channel.
Khalisha: type of fish.
Kharis: old river beds that sometimes carried water.
Khaskhas: a plant with odorous roots.
Kheddah: an operation to catch elephants.
Khejur: date palm, scientific name, Phoenix dactylifera
Khoska: type of fish, scientific name, Trichogaster fasciatus.
Khubber: news.
Kolis: tribe of Maharashtra.
Koonkies: domesticated elephants specially trained to capture, tame and manage wild elephants.
Kumbhir or Mugger: marsh crocodile, scientific name, Crocodilus palustris.
Kuruj pat: species of cane, scientific name, Licuala peltata.
Kusum: type of tree, scientific name, Schleiohera trijuga.
Lakuch: wild jack, scientific name, Artocarpus hirsutus.
Latkan: love birds.
Lodhas: tribes who reside in the Midnapore district of West Bengal.

Machans: platforms made of bamboo or branches on trees to sit and keep watch over animals during hunting or shikar.
Magar: blunt nose crocodile, scientific name, Crocodilus palustris.
Magur: type of fish, scientific name, Clarius magur.
Mahanim or Panya: type of tree, scientific name, Melia azadirachta.
Mahua or mowha: type of tree, scientific name, Bassia latifolia.
Mahseer: type of fish, scientific name, Barbus tos.
Malagiri: type of plant, scientific name, Cinnamomum glanduliferum.
Mandar: a thorny tree, scientific name, Erythina indica.
Mast: Urdu word which means a periodic state of heightened sexual activity and aggression in adult male elephants, characterized by the discharge of secretions from glands near the eyes and the continuous dribbling of urine.
Mathura: a type of black pheasant.
Memsahib: The European lady, in native parlance.
Mirgal: fish of carp variety, scientific name, Cirrhina mrigala.
Moonje: type of grass that grew in Lower Bengal.
Mrigaya: leisure hunting in ancient India.
Munjias: the spirit of Brahmin youths who died before marriage.
Mychitkha: peepal tree, scientific name, Ficus religiosa.
Nageswar: type of tree, scientific name, Mesua ferrea.
Narikel: coconut palm, scientific name, Cocos nucifera.
Nim or neem: type of tree, scientific name, Melia azadirachta.
Nul Bhadi: type of reed.
Nunia: type of tree, scientific name, Aegliatis retundifelia.
Pad: a large, stuffed bag strapped to the elephants back for cushioning.
Pafta or pabda: type of fish, scientific name, Callichrus pabda.
Panchayajna: the five sacrifices of: Deva yajna or worship of Gods, the Pitr yajna or worship of one's forefathers, the Manushya yajna or worship of fellow humans, the Bhuta yajna or worship of other beings and the Brahma yajna or the worship of knowledge.
Pangash: type of fish of the pimelodus species.
Pakar or pakur: type of tree, scientific name,
Palas: type of tree, scientific name, Butea frondosa.
Parah: hog deer.
Parav: festival in Hindi.
Pardhis: tribe of Madhya Pradesh i,e, the Central Provinces in colonial India.
Phauns: slip knot.
Piar: type of tree, scientific name, Buchanania latifolia.
Pichumanda: the neem tree or margosa in Sanskrit.
Pitlaraj: type of tree, scientific name, Amoora sobituxa.
Pipal or peepal or aswatha: sacred fig tree, scientific name, Ficus religiosa.
Pitraj or Rana: type of tree, scientific name, Amura rohituka.
Pret: Indian poltergeist.
Puli: fish of carp variety.
Rarh: land of lateritic clay, found in western Bengal.

Rogue: scoundrel. Here a destructive animal.
Rohu: type of fish of the carp family, scientific name, Labeo rohita.
Rita: type of fish of the pimelodus species.
Rupchanda or Harchanda: types of pomfret.
Sahib: the European gentlemen in native parlance.
Sail: type of fish.
Sal: type of tree, scientific name, shorea robusta.
Salagrama: Vishnu, a Hindu God.
Sambhar or Sambhur: type of deer, scientific name, Cervus unicolor.
Sanku: sting ray.
Sar: a variety of reed.
Shikar: hunting.
Shikaree or shikari: in Hindi the term means hunter. But usually used for native hunters in colonial India.
Shol: type of fish, scientific name, Ophiocephalus striatus.
Shola: an aquatic plant which grow wildly in wetlands, scientific name, Aeschynomene aspera L.
Sisso: type of tree, scientific name, Dalbergia sisoo.
Simul: red cotton tree, scientific name, Bombax malabaricum.
Singi: type of fish of the silurus species.
Suiral: type of tree.
Sundari: type of tree found in the Sundarbans, scientific name, Heritiera minor.
Sunn: coarse thatching grass, scientific name, Saccharum cylyndricum.
Surajbed: type of tree, the local name for tun, scientific name, Cedrela toona.
Susuk: Gangetic porpoise.
Tentul: tamarind, scientific name, Tamarindus indica.
Tangra: type of fish of the pimelodus species, scientific name, Macrones corsula.
Tal: the toddy palm, scientific name, Borassno flabilli formis.
Tali: sisoo tree or Indian rosewood.
Tanr: rocky, barren and infertile land.
Thana: police station.
Teak: type of tree, scientific name, Tectona grandis.
Tepa: type of fish, scientific name, Tetradon patoka.
Terai: a strip of undulating marshland of clay soil, lying parallel to the Himalayas and stretches from the river Yamuna in the west to the river Brahmaputra in the east.
Tonga: horse drawn carriages.
Tulasi: holy basilicum, worshipped by the Hindus.
Zamindar: landlord.
Zamindari: estate of the landlord.

Abbreviations

BFAR: The Bureau of Fisheries and Aquatic Resources.
B.N.H.S.: Bombay Natural History Society.
BRP: Bengal Revenue Proceedings.
DDT: Dichlorodiphenyltrichloroethane.
JBNHS: Journal of the Bombay Natural History Society.
KJV: King James Version (of the Bible).
NAI: National Archives of India.
W.B.S.A.: West Bengal State Archives.

CHAPTER ONE

INTRODUCTION

"The British colonization of India was incomplete without the pacification of the jungle,"[1] so the English took up the project of pacifying this site which personified disorder on the one hand and posed a serious challenge to authority on the other, it was imperative that this site be penetrated, controlled, commanded and integrated with the rest of the British dominions in India. The wild was perhaps the 'last frontier'which needed to be incorporated within British India because without penetrating this site with force and controlling it with legislations, the task of exerting mastery over India would remain largely incomplete. However the study of the wild had been a largely neglected aspect of Indian history before the 1980s and it entered into the realm of serious scholarship only from the 1990s as Environmental History as a different historical genre began to be accepted by scholars. The worldwide concern for the Environment made scholars delve deeper into the subject and search for the causes which had brought the world to the brink of disaster. In India, scholars and activists embarked on a mission to locate the causes of the spiralling environmental crisis and this led to a surge of writing on issues of the environment in which the subject of the country's forests and wild life predominated.

A BRIEF HISTORIOGRAPHY

The world woke up to the reality of an impending crisis when Rachel Carson wrote the *Silent Spring*,[2] a book which essentially dealt with the disastrous effect of the use of D.D.T, a chemical, used to eliminate pests but which resulted in the decimation of wildlife to such an extent that by the sixties spring came to the U.S.A. without the beauty of bird song. Probably no other book on the environment had such an impact on the consciousness of man as this, it helped in establishing a cardinal truth that 'in nature nothing exists alone' as 'there is an intimate relationship between plants and this earth, between plants and other plants, between plants and animals' and that nature was in sum, 'an intricate web of life whose interwoven strands lead from microbes to man.' This interconnectedness of life called for a modest, gentle and cautious attitude towards nature, rather than the arrogant, aggressive and intrepid route taken by synthetic chemistry and its products. Otherwise the web of life could very easily become the web of death.[3] The *Silent Spring* had a dramatic impact on public opinion, scientific research and state policy in the United States and the world over. There was a worldwide concern for the environment as human intervention had silenced the voices of nature throughout the world. In the American context this book can best be compared to the monumental work of George Perkins Marsh's *Man and Nature* and in terms of its impact on scientists and the public at large the effect of the two was also comparable.[4] Environmental history

emerged from the concern for the environment and though it faced an uphill task of being acknowledged as a separate sub-discipline of history, it benefitted from the shift in history writing where the alternative voices in history strived to accommodate new approaches to history writing. The initial suspicion of main stream historians underwent a gradual change and the sub-field has now been accepted and acknowledged not only by historians but also by scholars of other disciplines.

Clarence Glacken's *Traces on the Rhodian Shore* published in 1967 was a landmark in the study of environmental history. This book spun off a series of studies on global environmentalism. Keith Thomas's *Man and the Natural World* published in 1984, tried to fill in the gaps left by Glacken in the context of English environmental history. Another milestone was reached with the publication of Alfred W.Crosby's *Ecological Imperialism* in 1986 which was an enlargement of his previous work of 1972, the *Columbian Exchange*, and it focused on the effects of the introduction of crops and diseases by Europeans to the settler colonies and the West Indies.[5] However the seeds of environmental history were sown by the Annales School in the 1970s. These scholars inherited from Emile Durkheim the notion that the individual could only be comprehended within his social context. This total history was one which sought the synthesis of all the material, physical and mental forces that shaped the life of men in the past. Thus, to the scholars of the Annales School, the environment among other things appeared to be an important consideration in understanding the structures of the past. The Annales historians however did not consider themselves as environmental historians; nevertheless they served as a great inspiration to the environmental historians of the future.[6]

In South Asia, environmental history started to appear from the 1980s. The works of Robert K. Winters, Richard Tucker and John Richards[7] can be taken to spearhead the beginning of environmental history in the context of South Asia. The 1980s also saw a greater politicization of the issues of the environment, subjects regarding forests and ecology now became subjects of passionate debates and discussions and historians could no longer remain aloof from this exercise. Scholars from the Duke University, under the aegis of the Duke Ecological History took up issues of the history of deforestation especially in the tropics and the ensuing ecological transformation of India and the whole of South-east Asia in 1880-1980.[8] John Mackenzie came up with his the *Empire of Nature*[9] which dwelt at length on issues of hunting, natural history and conservationism. Richard Grove in his *Green Imperialism*[10] argues that in the colonial period the intervention in the wild was basically aimed at protection of the forests and nature. Therefore it was desiccationism that promoted the idea of forest conservancy in India and the rest of the colonies.[11] Ramchandra Guha in his books and articles differs with the contention of Grove. He argues that in the pre-colonial period the interest of the customary users of the forests were not jeopardized by state intervention as was the case in the colonial period and it was only with the objective of resource use that the colonial

state intervened in the forests of India. It was basically the acquisitive tendency of the imperialist power, which was driven by capitalistic compulsions that was instrumental in paving the colonial forest policy.[12] Madhav Gadgil, shared the contention of Guha. Mahesh Rangarajan takes a middle course and opines that the desiccationist fears was only partly responsible for influencing the colonial forest policy[13] and Ajay Skaria was of the opinion that desiccationist discourse was used by the imperial power to extend its domination over the forests.[14] Ranjan Chakrabarti sees the problem as essentially an integral part of a broader strategy of power which was geared primarily to ensure the domination of the Indian colony by its white rulers. The Indian jungles were the last frontier that needed to be penetrated and controlled and the forest acts were essentially made to achieve the same. The claims of the colonial state were legitimized and those of the indigenous people made illegitimate. After having destroyed both the rich timber reserves and the animal wealth of the country the white rulers turned into self-styled protectors and conservationists.[15] Valmik Thapar contends that the coming of the white rulers did wreck havoc on India's wildlife but he applauds the endeavour of the few great men who founded the *Bombay Natural History Society* in voicing the first concerns about vanishing species and their genuine efforts to influence the colonial government to undertake measures to save wildlife.[16] There are the other voices, raised by people like Vandana Shiva who opines that since the British interest in forests was exclusively for commercial timber their approach was a one dimensional, masculinist science of forestry.[17] K. Sivaramakrishnan has argued in his *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India* that the colonial state by establishing regimes of control and compiling bodies of standard expertise would enable the transitions of forests perceived largely as wild place, into managed forests that were duly incorporated into regimes of production. By the 1860s India was well integrated into the empire and reservation was the dominant mode of control over forest lands and revenues. By 1905 the total forest area under reservation was 6000 square miles.[18]The debate and discussions on the forests and wildlife continues and this work aims to take the legacy forward.

FROM JUNGLE TO FOREST: THE TRANSFORMATION OF WILD BENGAL

The untamed wilderness of Hindostan[19] was a site which needed to be ordered and integrated within the Empire, as a chaotic domain could not be permitted to exist in British India. The vast unclaimed tracts and the *jungles* per se were 'savage'[20] and even those woodlands which were kept as *reserves* defied the notions of order, hence the imperial power took it upon themselves to transform the *jungles* of India into 'forests' –

ordered entities which conformed to the standards of 'forests' that existed back 'home'. J.S. Gamble commented in 1826, "*Forestry in India was a comparatively modern institution. In former times, considerable areas were scrupulously protected but the forests were kept as game reserves for the pleasure of princes and great nobles. The idea of conserving forests in order to maintainan uninterrupted supply of forest produce useful and even necessary for the people – the idea of maintaining a proportion of the country under forests on account of the indirect benefits conferred on the empire at large by the very existence of forests was never thought of by previous governments. The period however has passed away; and the necessity for maintenance and conservative treatment of forests, as a mainstay of agriculture, is now almost universally recognized, while forest conservancy is regarded as a state subject.*"[21] By 1818 the task of carving out an Indian empire was nearly complete so, now the colonial state turned its attention to the conquering and controlling of India' s woodlands and thus began a new chapter in the history of Wild India. In its endeavour to convert the woodlands into 'managed'[22] landscapes the colonial state conjured up the regime of soil and tree manipulation and initiated a regime of intense man-animal conflict. The intervention was primarily intended to maximize resource use and thus increase profit. Rational forest management was emerging as a trend worldwide and the colonial state followed this trend as it facilitated maximization of resources and thus paved the way for the sole exploitation of the same. The introduction of modern forestry in India was thus primarily aimed at serving the interest of the 'self'. The intervention in woodland Bengal too, needs to be assessed in the light of this quest to exploit and exert sole claim on the rich and varied treasures that India's woodlands could boast of. The appointment of Dr. T. Anderson, Superintendent of the Royal Botanical Garden, Calcutta, as the first Conservator of Forests in Bengal in August 1864, marked the formal beginning of forest conservancy in Bengal. To demonstrate the colonial state as legitimate it became imperative to introduce a system of direct supervision and stricter surveillance of both the settled and the wild landscape. The colonial dominions needed to be enclosed like a prison[23] where everything needed to be monitored and watched. Forest conservancy in Bengal as in the rest of colonial India needs to be assessed from this perspective. The woodlands needed to be enclosed so as to assert sole and absolute control over them.

Scientific forest management was introduced in Bengal to transform the lawless *jungles*, into well ordered and disciplined sites as that would facilitate the right of intervention, manipulation and the freedom of resource use but this at times changed the nature of the forests, as trees which were not valued as timber were substituted by timber worthy varieties, thereby disrupting the whole ecological balance of the region. Sylviculture was an integral part of forest management but it involved interference with the natural vegetation of a region. For example the second half of the nineteenth century saw the introduction of species with a greater economic potential. The basic objective of the colonial state was that *the forest must be composed only of marketable species*[24] and

to achieve that trees like the *Pithecolobium Saman a native of Peru also known as the "rain tree" for inducing local showers as well as important for firewood*[25] was sought to be introduced in Lower Bengal. It has been shown by K. Sivaramakrishnan how *sal* (*shorea* robusta) came to be introduced over a vast area of colonial India stretching from the eastern end of Assam to the western most foothills of the Himalayas; from the lower reaches of Nepal and the Sikkim montane regions to the upper elevations of the Gangetic valley; and all over the undulating landscape of the Chottanagpur plateau, extending into the Central Indian plateau region.[26] Sal plantations came up in the Kurseong Terai with the largest plantation being at Bamanpokhri and the other important sal producing blocks were Dalka jhar, the Sivoke forest and the Marjha forest. [27] Sal grew best in the Tista and the Rangit valleys[28] and teak plantations were introduced in the valleys of the Bengal Terai and in Chittagong in as early as 1868,[29] thus replacing existing flora with commercially valuable species. Moreover the extension of agriculture resulted in the clearance of the existing natural vegetation and this was bound to affect the ecology of the place. Cinchona and tea plantations came up in the Darjeeling Himalayas and tea was also successfully grown in the Duars, the natural fall out of this was not only destruction of the existing flora but also loss of habitat for the wild animals of this place. The clearing of the *moonje* grasslands in Lower Bengal, to extend agriculture, resulted in the loss of habitat of the ubiquitious Royal Bengal tiger, forced out of its abode; it transgressed into the domain of man thus intensifying the the man-tiger conflict. The tiger was not the only animal to be hounded out of its natural abode; most other animals suffered a similar fate. It was indeed a peculiar predicament; grass needed to be cleared not only to make way for agriculture or the plantation of economically viable trees or to set up tea and cinchona plantations, but clearing of grass was also essential to protect men and their livestock, as well as their crops from the depredations of tigers, elephants, buffaloes and deer but this had another grave fall out, it resulted in habitat loss for the animals who lived in these grasslands and they strayed into the domain of man thus intensifying the man-animal conflict. The wild frontier was increasingly getting pushed back and the wild animals uprooted from their homes often wandered into the realm of men only to be targeted and persecuted. The wild frontier was also the colonial frontier,[30] it was imperative to extend imperial control over this vast site which was a very challenging proposition but without which the enterprize of 'empire building' would be largely left incomplete. It was here that the English encountered the most masculine of all the challenges because in wild India the colonial state was confronted with the greatest challenge to their authority. What ensued was a battle for superiority and though both sides suffered great casualties the greatest loss suffered was by the the country which stood helpless in the face of the frenzied assault on both its flora and faunal resources.

Exerting control and establishing comand over flora was perhaps much easier than establishing the same over fauna. The wild *beasts*[31] encountered in this country were very different from the ones found in the temperate lands of Europe in terms of power,

ferocity and deadly demeanour, they defied the white man's perception of the 'self' as invincible, they were overwhelmed by what they encountered in this country and needed to 'order' the savage and the wild, so, was undertaken an unprecedented assault on wild animals. Not only were animals sought to be exterminated by use of sheer force they were also condemned as *vermin* thereby justifying and legalizing the mayhem unleashed on them. The battle royal was fought with the Royal Bengal tiger, it was as if that the white-man and the tiger were locked in a conflict to assert mastery over the wild.[32] In the ensuing battle the animal was decimated in such great numbers that voices began to be raised by many of their own stock about the need for protection. The imperial power however was bent on *securing landscapes from vermin*[33] and also extending its control over noxious beasts and the most effective mechanism to achieve the same was *shikar* or hunting.

HUNTING AS A MEASURE OF EXERTING CONTROL

Hunting or more specifically game hunting was practiced by man from the earliest of times and India was no exception. In fact if one probes into the history of hunting or *shikar* in India, it will become clear that the *Homo erectus* was the first proto-human to start organized hunting. In the pre-cultivation era hominids were dependent on animals for food and hides. The famous Bhimbetka rock paintings testify to the importance of hunting in the Stone Age. It was perhaps in the Neolithic or the Chalcolithic age that hunting emerged as a sport in India. Hunting or *mrigaya* was depicted in the epics: the Ramayana and Mahabharata, it continued through the ancient and the medieval periods, infact the English adopted certain shikar practices of the Mughals. However hunting witnessed a major transformation in the colonial period, it emerged as a mechanism to exert superior authority over wild India. Shikar ceased to be a mere leisure activity or an activity which helped tone the body and keep the soldiers war-ready, it became integral to the assertion of imperial control. The joy of subjugating a ferocious beast also whetted the notions of superiority of the Englishman, so shikar not only offered scope for exotic sport, it helped to establish the English as the masters of the woodlands. It was not enough to annexe the wild, it was imperative to exert supreme domination over the wild beasts, and shikar helped in achieving this imperial objective.

Sport hunting fitted perfectly with the imperial agenda; pleasure and work matched seamlessly with each other as colonial officers while on official tours combined sport with rule. Infact, hunting was used as a bait to lure reluctant officers to India, a land of extreme heat, pestilence and deadly disease. Shikar was an extreme sport that tested one's courage, agility, presence of mind and perseverance but it was worth the effort, it gave the Englishmen the taste of the Oriental wilderness and the opportunity to acquaint themselves with the diversity of the country which defied the various western constructs about her; she was not merely tropical as she was imagined to be nor was she effeminate

as the English experience with the wild revealed, the country could not be type-cast, it was an enigma and in the whole colonial period one witnessed the imperial power trying to unravel the mysteries and surprises associated with this land. Sport hunting helped to establish the otherness of the 'self'as well as to prove the masculine prowess of the white shikari and it was even used to establish the paternalistic tendency of the colonial power. The English continued with the legacy of the *howdah* shikar of the Mughals and their successor states with the upper echelons of Anglo-Indian society pursuing this mode of very elaborate and oppulent shikar. The magnificent howdah shikar on top of elaborately decorated elephants and to the accompaniment of a retinue of beaters, bugle players and servants was a grand spectacle. The grandeur of the exercise over-awed the natives. In fact it was a mechanism adopted to intimidate the onlookers and helped the colonial endeavour of trying to assert its mastery.[34] Writes Lady Minto, "*At Dachigan Camp two thousand were accommodated, including the Maharajas band of eighty musicians and the beaters numbered six thousand. We were told to expect bear, deer and barasingh, but the forest was devoid of game. I was fortunate however, in killing a large, brown bear, and the next day Rolly shot the only barasingh on the beat. The return of the party was a curious sight. They alighted from the tongas at the gates, where the pipers and drums awaited them, playing a suitable Scottish air for the return of successful sportsmen. Rolly and the Maharaja slowly advanced, accompanied by the band and followed by a huge retinue, and preceded by an army of men carrying torches.*"[35] Such opulence befitted only a master and the English were the unquestioned masters of India for approximately two hundred years. Hunting from *machans* was another popular means of shikar. Machans or platforms were erected on trees to await the arrival of big game, a decoy animal was tied nearby as bait and native beaters would drive the quarry out of its hiding to help the Anglo-Indian hunters to shoot the animal dead. Celebrations of having got the coveted animal would follow, the sahib would pose for photographs to be taken with his kill; a testimony to his bravery and the 'good' life spent in a distant land.The chase for quarry was also enthusiastically pursued, it was a practise with which they were acquainted back 'home' and undertook to pursue foxes and hares, here the method was mostly adopted for hog-hunting or pig-sticking. In all forms of hunting the assistance of the natives was absolutely necessary but they were never acknowledged as equal partners, they were servants recruited to obey the orders of the masters. It was not only the elaborate howdah shikar which was primarily pursued by the high officials of the Raj, the other forms of shikar pursued by the sahibs too, were undertaken to assert the difference between the superior European 'self' and the inferior native 'other'. Hence it was not enough to overpower the beasts in the woodlands, it was also essential to assert the superiority of the Englishmen vis a vis the natives because it was felt that that would help the colonial agenda of enclosing the forests as the natives overwhelmed by the might of the white-men would easily submit to the act of controlling and commanding of the woodlands. Shikar also fitted in perfectly with the paternalistic tendencies of the Raj; the

sahib rescuing ‘helpless’ natives from the clutches of a predator like the tiger or the leopard, helped the cause of the imperial power. In fact this projection of the native as ‘helpless’ was also a conscious ploy on their part because that would greatly enhance their importance as protector and justify their acts to extend control and exert command over the wild.

The assault on wild animals was however not restricted to sport hunting, the colonial state was hell bent on vermin eradication and thus was heralded the era of reward hunting which brought about an unprecedented loss of fauna. The imperial power realized that it was nearly impossible to eradicate ‘vermin’ by themselves so they sought out partners who would help them realize their goal. Where ever the interest of the state was jeopardized by the depredations of beasts they were hounded out and hunted down but this could not be done solely by the Englishmen so they announced rewards to eradicate pests. The natives mostly subsisting on a bare minimum found the rewards very lucrative to resist, moreover the menace from deprading beasts hampered agriculture and destroyed their live-stock, so they collaborated with the state to wipe out vermin. The rewards increased or decreased according to the dread factor both real and imagined of the beasts or their ability to create a nuisance. In Bengal the largest amount of rewards were given out to eliminate the tiger and venomous snakes because the threat from them to life and property was perceived to be the greatest. Reward hunting caused irretrievable loss of wild animals and by the turn of the century the country was on the brink of a wildlife crisis.

PRESERVING THE WILD

The forest acts in India were chiefly aimed at monopolizing resource use by the imperial power.When the First Forest Act was passed in 1865, its chief purpose was to inaugurate the era of exclusion of the native ‘other’ and thereby exert exclusive control over the wealth of the forest. The Act of 1878 further intensified control over the woodlands. The acts endeavoured to create preserves and tried to restrict resource use of the indigenous people but could not prevent the steady decline of wild animals because inspite of introducing such concepts as open or close seasons, bag limits, the introduction of entry passes or the issuance of permits to enter reserved forests the white man as well as the natives continued to kill animals, the first ‘legitimately and the latter ‘illegitimately’. It was impossible to keep the indigenous people out of the woodlands as they had been using the forest and its resources from times immemorial; it was their only source of sustenance. Moreover in colonial India there existed a very lucrative trade in animal trophies, hides and skins and exotic bird plumage, that proved to be an added inducement to forcefully enter the site where restrictions were imposed, hence the restrictions in a way forced the natives to become poachers, they knew the forest landscape so well that it was difficult to keep them at bay. They killed animals on the sly

and sold them at the thriving grey market for animal trophies thus earning a handsome income. Pushed to the brink the natives did not have the luxury to differentiate between right and wrong and they found no wrong in using the forest and its resources because they were doing just that from the earliest of times, the only difference now was they found that the opportunities had increased but there were also restrictions imposed on them, so they chose to defy restrictions and forcefully use what had been traditionally theirs. The imperial authorities took advantage of the defiance of the indigenous people to absolve themselves of all blame for diminishing species and put the blame squarely on the natives; they were held to be the culprits who were responsible for the massacre of wild animals and thus access was further restricted to them. The task of carving out a preserve for exclusive consumption was being perfectly drawn up by the colonial state.

The steady depletion of wild animals started to ring alarm bells and there was the fear of eventual extinction of species. The voices of concern began to be raised from within for example by the avid lovers of shikar, i.e. the members of the Planters' Clubs, Tent Clubs and the 'few wise men'[36] of the Bombay Natural History Society and they started to put pressure on the government to take steps to arrest the rot. The Wild Birds and Game Protection Act of 1887 tried to pacify these voices by further restricting use of the natives but that did not alleviate the condition of the wild animals, protection did not discount the hunt, it merely tried to secure the same for the officials of the Raj and their collaborators. The 'problem' animals continued to be exterminated and reward hunting continued unabated.

By the turn of the century one sees a peculiar situation, on the one hand killing of wild animals for sport and to secure human lives as well as that of live-stock continued, on the other, the fear of extinction was very palpable, at least a small group of men began to realize the importance of lives other than the lives of men and their live-stock. Animals began to be given a new identity: they now came to be called wild-life. But these voices were too small to be given importance; wild animals were still subjected to senseless assaults. The First World War aggravated the situation further. The government came up with another legislation to protect the forests and wildlife (new connotation) and passed the Indian Forest Act of 1927 which made the rules relating to entry in the forests and resource use more stringent but it could not stem the depletion of wild animals. The inter-war years proved to be the nemesis of wildlife, though the 1930's saw the coming up of the first National Park of the country, aimed to provide a safe haven for animals. But here too the objective was to ensure a steady supply of animals in the buffer zones thus providing opportunities for sport to the sahibs and their collaborators. Till the very last days of the Raj wild animals were hunted for leisure and slaughtered where they threatened the settled agricultural society. The wild and its resources had great economic value and that was the most important determinant to an imperial power, the history of wild India needs to be assessed in this light.

Bengal the epicentre of colonial rule till 1911, witnessed the same penetration and exertion of control and command of her woodlands as the rest of colonial India; when her timber needed to be exploited, trees were felled indiscriminately, when her wild animals threatened agriculture they were exterminated, when her vast repertoire of game animals lured the adventure seekers and sports lovers, they hunted animals with such gay abandon that the roar of the tiger was heard only in isolated pockets by the time they left the country. Preserving the wild was chiefly meant to serve the interest of the English and the sole quest was to monopolise the wealth of the forest. The main purpose of preservation of the wild was to extract maximum benefits from it, altruism was a covert used to veil the actual intention.

THE PRESENT WORK

This work is a humble endeavour to delve into the vast repository of information about wild Bengal and analyze and evaluate the same in the historical perspective. It attempts to explore a new area of study, an endeavour to show how the faunal resources contributed to the expansionist urge of the British imperialists in Bengal, their desire to command and 'order' resulting in unleashing the most brutal assault on wild animals, the subsequent depletion of species and the measures taken to preserve and perhaps eventually conserve wildlife in particular and forests in general. Though in the course of the work, I was convinced that it was preservation rather than conservation which was sought to be introduced in not only the forests of Bengal but this was the case throughout British India.

At the beginning I have tried to delve on what was perceived to be wild or how the wild was a construct used to differentiate between the superior 'self' and inferior 'other'. The perception of what was 'wild' is sought to be analyzed here to understand how it helped the colonial power to justify intervention to civilize the country in the 'throes of backwardness and utter chaos and disorder'.

The next chapter seeks to map wild Bengal. The English encounter with Bengal as the rest of India incited contradictory responses; one of wonder the other of dismay. The hot and humid climate, pestilence and diseases, the 'strange' customs and practices of the natives stood in juxtaposition to the fabled land of milk and honey and all things sweet. But there was the other Bengal too; the hills of north Bengal with its salubrious climate fringed on its north by the snow capped peaks of the mighty Himalayas, interspersed with lush foliage, the gurgling streams and smalls rapids and waterfalls, then the foothills covered with towering trees, followed by the Gangetic plains and the mighty rivers of the plains, the *khals* and *bills*, the undulating terrain of the plateaus, bursting out in flaming red blooms in spring, the picture perfect landscape of the Chittagong hills and the vast expanses of jungles, the abode of the most ferocious of animals offering the perfect quarry for the most sought after sport: shikar. The present work confines itself to linguistic Bengal and the third chapter tries to capture the diversity of the region by an in

depth study of the natural wealth of the districts and the attempt of the English to convert the lawless wild into an ordered entity i.e. transform the *jungles* a term pejoratively used, to forests in the lines of the forests that existed 'back home' [37]. They set up the Forest Department and passed legislations to convert Bengal's woodlands into a site which conformed to their notion of forests.

The fourth chapter takes up the issue of the hunt in colonial India and seeks to establish its role in exerting imperial control over the wilderness. Shikar not only provided sport and succour to lonely officials in a land so far away from home but it was also a mechanism used to exert imperial control over the jungles of the country. The chapter is a detailed study of the various forms of shikar, the role they played in establishing the 'otherness' of the English, the animals that were most coveted as quarry and their trophy value. The evolution of the taxidermy industry to preserve trophies has also been taken up in this chapter. The role played by Anglo-Indian women in shikar, their side of the story has also been discussed, as have the role of fire-arms and its role in transforming shikar.

Chapter five tries to analyze and study the evolution of shikar in the context of linguistic Bengal and occasionally refers to the same in the context of Assam. The chief objective of the chapter is to make a comparative study of the hunt in northern and southern Bengal and also establish the grave consequences suffered by the fauna of the region due to sport hunting as well as bounty hunting and reward hunting and how the quest to 'order' resulted in unleashing mayhem on the wild animals of Bengal.

The sixth chapter is about the implementation of preservation measures in colonial India. I have argued that it was not conservation but rather preservation that was pursued by the Forest Acts was aimed both at ordering as well as preserving flora and fauna. However the acts of preservation were directed chiefly at carving out an exclusive domain of resource use for the imperial power and its collaborators. The acts helped in converting the woodlands into 'enclosures', thereby legitimizing the activities of the colonial government in this site. The chapter also discusses specifically the coming of the forest administration into Bengal and the measures adopted for preserving her wild. The forests of Bengal have been very famously called 'nature's great menagerie'[38] and so the inducement to exert sole rights over them was also great. What is very significant in the context of the colonial government's irresolute resolve to penetrate and control the 'wild frontier' is that they were involved in this protracted conflict with the wilderness because they realized the economic importance of the forests and knew that all efforts to carve out an exclusive domain for themselves here was worth the hardships and pain. But where the colonial power faltered was in the espousal of the exclusionary logic of preservation, they could not afford to exclude the indigenous people, the traditional users of the resources of the woodlands if they were really serious about making preservation work. The natives had their own methods of preservation which were conveniently overlooked, denying them access and the right of use of the resources of the forests proved counter

productive, it was a major hindrance to the quest for preservation. The seventh and final chapter consists of the concluding remarks.

The empirical texture of this work has relied much on official documents procured from various archival repositories such as the National Archives of India, the West Bengal State Archives and the Bombay Natural History Society. The work has also relied on journals like the Indian Forester, Hooker's the Himalayan Journal and the Journal of the Bombay Natural History Society. The Gazetteers of the Districts of Bengal were also consulted. One of the finest sources of information has been the accounts in the form of diaries and memoirs left behind by the *sahibs* and *memsahibs*. Secondary sources in the form of books and articles on the environment in general and forest in particular helped in formation of ideas and opinions. This work is a humble attempt to explore a new area of study, an endeavour to show how the faunal resources contributed to the expansionist urge of the British imperialists in Bengal, their desire to command and 'order' resulting in unleashing the most brutal assault on wild animals, the subsequent depletion of species and the measures taken to preserve forests in general and wildlife in particular. It thus hopes to fill an important knowledge gap.

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CHAPTER TWO

COLONIAL PERCEPTIONS OF THE WILD

The 'wild' conjures a sense of danger, a sense of reverence for nature in its purest form, as well as a sense of caring for something that is delicate and fragile as also easy to ruin...[1] In the eighteenth century European mind the wild or the wilderness signified a 'deserted', 'desolate', 'savage' or 'barren' area in short a 'waste'. Its connotations were anything but positive and the emotion one was to feel in its presence was 'bewilderment' or 'terror'. Many of the world's strongest associations then were biblical, for it is used over and over again in the King James Version of the Bible to refer to places on the margins of civilization where it is all too easy to lose oneself in moral confusion and despair. The wilderness was where Moses had wandered with his people for forty years, and where they had nearly abandoned their God to worship a golden idol.[2] "For Pharaoh will say of the Children of Israel," we read in Exodus, "They are entangled in the land, and the wilderness hath shut them in."[3] The wilderness was where Christ had struggled with the devil and endured his temptations: "And immediately the Spirit driveth him into the wilderness. And he was there in the wilderness for forty days tempted of Satan; and was with the wild beasts; and the angels ministered unto him."[4] "The delicious Paradise" of John Milton's Eden was surrounded by "a steep wilderness, whose hairy sides /Access denied" to all who sought entry."[5] When Adam and Eve were driven from that garden, the world they entered was a wilderness that only their labour and pain could redeem. Therefore the Wilderness was a place to which one came only against one's will, and always in fear and trembling. Whatever value it might have arose solely from the possibility that it might be "reclaimed" and turned toward human ends—planted as a garden, say, or a city upon a hill.[6] In its raw state, it had little or nothing to offer civilized men and women. When the English came to India and encountered the wild or the 'untamed nature', they felt that it was their duty to transform this ruined and debased Indian landscape and create a peaceful and prosperous civilization modelled after an 'improved' and industrious Britain.[7] They perhaps visualized the whole of India as 'wild' as that would help their endeavour to 'civilize' this land. However it was India's jungles and woodlands that appeared the wildest and so civilizing this site was the most formidable and uphill task yet it was imperative that it was done, so unfolded a saga of forceful penetration, brutal subjugation and impeccable planning and execution of a mega plan to enclose and control the site for monopolistic use.

The concept of the wild I would argue is therefore a colonial construct which helped to differentiate between the superior 'self' and the 'inferior 'other' and this binary opposition of the colonial self versus the colonised other is encoded in the colonialist discourse as a dichotomy necessary for domination. The first encounter and the

subsequent 'discovery of India'[8] established beyond doubt that this country was very different from England and whatever did not subscribe to the things back 'home' appeared 'wild'. The jungles were wild and so were the settled places, the wild denoted 'otherness' and hence justified intervention to civilize. India was 'wild' as it was the land of disease and death, of savage creatures and pestiferous jungle. The European description of the Sundarbans in the 1820s and 1830s were filled with images of savage creatures and jungle miasmas. In 1823 Bishop Herber penned one of the most powerful descriptions of this kind, portraying the Sagar Islands as a dreary and dreadful place full of 'tygers, serpents and fevers'[9] Alexander Duff writing in 1839 speaks of 'the dismal mud banks, dingy forests and impenetrable thickets of the Sundarbans' being 'the receptacles for ages of all manner of destructive exhalations which load the atmosphere with pestilence and death.'[10] The Terai, the narrow belt of forest and swamp that ran across the narrow rim of India between the plains and the Himalaya, was considered so deadly as to be impassable for Indians and Europeans alike through a large part of the year. The whole land of India in general appeared most deadly to the European eye: malignant miasmas emanated from every swamp, graveyard, paddy field and jungle summoned up by tropical humidity and a powerful sun, wafted along on insalubrious winds, or rising up in invisible clouds from rotting vegetation, human detritus, and putrid mud.[11] Moreover, the nineteenth century India was commonly visualized as a land of disease and death. The 'three grand divisions of tropical disease,'[12] namely cholera, malaria and dysentery resulted in high levels of white mortality, which was greatest among the Indian rank and file soldiers but did not spare the other Europeans too. The writings of this period are replete with accounts of European mortality due to disease and pestilence. The whole of the eighteenth and early nineteenth century witnessed high levels of mortality, particularly in Bengal, the deadliest province of British India and home to a large number of European inhabitants.[13] All this proved beyond doubt the wildness of this country. If 'wild' implies raw and savage, then to the European eye it was not only India's jungles that were wild but it was all pervasive and the English took up the 'responsibility' to 'improve' the situation by civilizing the wild.

The jungles were wild so they needed to be transformed to make them 'useful' to the English and so the woodlands were sought to be cleared, to make way for agriculture as well as timber was sought to be accessed from these great reserves of the same. They were also fine repositories of big and small game which afforded a very good opportunity to pursue leisure hunting. But here the English faced possibly their greatest hurdle as they soon discovered that the 'jungles' defied the stereotypes regarding the Orient, they could not be typecast as 'weak' and 'effeminate', exuded a masculine prowess and had the element to match the valour of the 'masculine' Occident, in other words, the English found their match here. In the post-Mutiny years when the English efforts were geared towards establishing themselves as the 'ruling race' there was an all out effort to project themselves as brave, daring, risk-taking and indomitable but the jungles proved to be an

impediment to the realization of this objective. The woodlands of India threatened to upset their mission of trying to emerge as the legitimate arbitrators of India's destiny. They could not be easily subdued nor could they be easily penetrated neither could the ferocious wild animals there be easily overpowered nor were the tribes that resided within or in their periphery at all submissive, in fact whenever the opportunity came they stood up in arms to safeguard their age old rights. This was in complete juxtaposition to the Englishman's experience elsewhere in India. The 'other' India in contrast could easily be assaulted, looted, plundered and dominated. It was vulnerable and could be 'used and abused'[14] as they desired but here the challenge was formidable and threatened to cast doubts on the invincibility of the colonial masters. To the racially superior white 'masculinised' British imperialists[15] the challenge needed to be taken head on, no matter how difficult the task, it had to be accomplished. The project to gather, classify, categorize and order information[16] was taken up as was simultaneously taken up the work of penetrating and conquering this 'last frontier' in India. The information gathered served twin purposes; one, to facilitate better control and governance and secondly, to conjure up an image of chaos and disorder, of indiscipline and savagery which was used as an alibi to penetrate and exert control and dominance in this site.

The connotation 'jangal' was equated with a desert and used to describe dry, stony landscapes, thinly vegetated with thorn-bush and scrub by early writers like Benjamin Heyne[17] in the 1790s and 1800s following the original Sanskrit and vernacular meaning of the term.[18] By the 1830s jungle came to signify dense tangled vegetation, so thick as to be virtually impenetrable.[19] The word was used pejoratively to signify danger, disorder and vegetative excess. However to the sports shikari it signified the abode of big and small game and thus the land of opportunities. But generally the jungle was feared, as it harboured bandits and dangerous predatory animals. It was seen in further negative light as it was associated with disease, especially malaria which killed or incapacitated many Europeans as well as their Indian subordinates. The loss of white men or the harm to white bodies was perhaps the more potent reason to accord the site a greater negativity. By the 1820s military men and medical officers spoke in a single phrase of 'jungle, pestilence and fever'.[20] This kind of multiple association between physical harm and moral evil leant itself to Christian representations of a landscape that was perceived to be both heathen and deadly, as entangled with rank, miasmatic, over-fecund plant life as Hinduism appeared to teem with primitive beliefs and convoluted superstitions.[21] By extension, even Europeans who spent too long up-country, isolated from their own kind, were likely to turn 'jungly'[22] or, in Emily Eden's expressive phrase, to have their civilized manners 'jungled out of them'.[23]

The 'real natural jungle' was juxtaposed to agriculture and it was the 'mainstay of primeval barbarism' but it was fast disappearing from Bengal even as early as the mid-nineteenth century, to yield place to a cultivated landscape under 'the stability of our (British) rule'. [24] The jungle was also used in the sense of fallow land, tilled once but had

since been left uncultivated. As civilization was inextricably linked to cultivation the existence of wasteland overgrown with secondary vegetation like grass and brushwood signified decline and the rot needed to be stemmed by bringing the site once again under the plough. So the neglect of cultivation meant a lapse of civilization and this assumption was reinforced by its faunal associations.[25] Just as abandoned fields and villages were said to have 'gone to jungle,' so the proliferation of tigers, bears and wild elephants was seen, as in the aftermath of the famine of 1770, as a sorry index of human decline and depopulation.[26] Therefore the quest was to 'improve' the land by restoring cultivation. For example in Central India, the Maratha Wars resulted in the neglect of agriculture and thus led to the spread of jungle, land was usurped by wild beasts especially tigers and an all out effort was made to 'improve' this land by killing 'vermin' and promoting agriculture. The jungle was associated with revenue loss therefore both virgin forests as well as wastelands were cleared to make way for cultivation. This not only increased revenue yields but also helped in the spread of the 'spirit of improvement.' The endeavour was to transform the jungle into forest as it signified orderly management for profit. It also incorporated the ideal of the greater good of the greater numbers but the prerogative of deciding whom or what constituted 'greater' lay at the hands of the English masters.

The jungle was held in great dread, especially India's primeval, untouched woodlands with its weird sights and sounds overwhelmed the European eye used to a more predictable European forest. The shrill cry of a cicada, the grunting of wild boar, the deep roar of a tiger or the hooting of the jackals at night were all alien sounds as was alien, the sight of wild and ferocious beasts that roamed the jungles and grasslands. The dread associated with meeting the most feared animal of the Indian jungle, the Royal Bengal tiger, the fear of a deadly Indian viper slithering near one's feet or the vicious presence of the crocodile in the swamps made the wild a much feared site. The Englishmen felt threatened and helpless in the grip of this unknown dark world. However, India's jungles appeared as a hazardous and unpredictable territory not only because it was the abode of fierce and 'evil' beasts but also because they discerned here the existence of certain supernatural elements. The dread associated with the dense woodlands or vast wastelands, unkempt and overgrown with thorns and brambly bushes is very well reflected in the accounts, diaries and stories written by the Europeans in the colonial times. By the final decades of the nineteenth century ghost stories or weird or uncanny tales of the supernatural began to reflect the alienation experienced by British military and merchants in the colonies.[27] A.I.R. Glasfurd gives an account of a story related to him by a doctor. The doctor narrated his petrifying experience and it went thus:

"*I noted that the moon was not only up but floated in a serene colourless sky, flooding the pool below me in a pale clear light, while at my side a figure sat and pointed with a strange, bloated and swollen, bandaged arm at a dark mass that broke the silvered surface of the water below! They say that 'the ruling passion is strong in death'. Acting*

on my first impulse, I raised the rifle that lay in my lap and getting the white card night-sight on the tiger's shoulder, fired.

The brute rolled over on the sand, plunging, grunting and struggling and as it did so, there came two light pats of an approving hand on my back, a deep drawn sigh and the still air was filled with the most appalling odour which I once recognised as the peculiar smell emanating from a body in the last and hopeless stage of pyaemia or blood poisoning!

I whipped round! The machan was empty!

The silence was paralysing and unbearable."[28]

The fear associated with India's jungles multiplied manifold with the real or imagined existence of the supernatural. It also made it more wild and unpredictable and thereby even more justifiable to extend their hegemony over it.

India's woodlands not only aroused fear and dread but their idyllic settings often cast a spell on the Englishmen. A.I.R. Glasfurd reminisces about the jungle in his memoirs:

"*Quic- kur-kur of a barbet, 'I was lost in a reverie, watching the orange disc of a full moon lift over the shoulder of the hills, the sighting of a big fine coated hyena, come to have a drink at the nala, barking deer moving here and there and yapping Aow! Aow!" "….Why is it that the moonlight throw such mystery over the woods? The colours of the sleeping landscape, though restricted to blues, grays and palest yellows are still marvelously diverse in tone…." "Many a nights have I spent in this al fresco manner….*" [29]

Andrew Leith Adam's writes:

"*It would be useless to dilate on the advantages India offers to the naturalists, and with respect to the Himalayas, perhaps few regions afford like inducement for study. Their vast ranges are often enclosed in verdure to the summits and on the highest to the confines of perpetual snow. In the rich and fertile valleys animated nature appears in all its loveliness and beauty. The zoologist may ramble over hill and dale, mountain and plain and after a life-time of constant observation find his delightful pursuit more attractive than ever. It is on theses noble mountains that the sportsmen can enjoy unscathed by the burning Indian sun; in their lovely glens bears stalk undisturbed, whilst various species of deer, wild sheep, goats and the ibex, feed unmolested on the craggy re steeps. In forest and valleys along the sub-Himalayan range tigers and leopards prowl, and the wild dogs and various foxes seek subsistence wherever their peculiar prey is plentiful. Add to these the numerous pheasants and partridges, whose elegance and beauty are unsurpassed by the allied birds of any other country. The endless variety of plants from the lichens on the mountain top to the deodar and Himalayan oaks in their native forests, present one of the choicest field of the botanists.*"[30]

The reader of these texts would be struck by their mystic and romantic components. This romanticization and mystification was coupled with a simultaneous desire to 'improve' both for facilitating greater income and profit as also for aesthetic purposes to make the wild landscape more orderly. F. J. Shore, the Assistant Commissioner of Dehradun in1827 wrote about the 'grand and sublime' mountains in the distance and extolled the beauty of the changing seasonal hues of the *sal* and *sisso* forests of the lower slopes. But his was not an unstinted praise for the glories of untouched nature as he concludes by observing: "*Were there but cultivation and habitations of man on the level between the river and hills, the scenery would be perfect.*"[31] J.D. Herbert believed that it was Dehra Dun which had the greatest potential than anywhere else in India to have a European settlement, where the feel of 'home' amid the green fields, hedges and streams could be best realized. It was in this idyllic spot that Herbert felt the greatest need and opportunity for European improvements' [32]

I would argue that the wild in India did not only mean her wilderness in fact everything in India appeared 'wild' to the European eye. Like many other European travellers of the time, Bishop Herber in the 1820s was struck by the 'very awful scene of desolation, ruins after ruins, tombs after tombs, fragments of brick work, freestone, granite and marble, scattered everywhere over a soil naturally rocky and barren',[33] in between the gate of Agra and Humayun's tomb. The whole scenery amid the ruins appeared 'only ugly and melancholy'.[34] In the accounts of Emma Roberts, the ruins of tombs, temples, serais and palaces added to the wildness and the dreariness of the scene in Delhi.[35] Major Lloyd after his three month Himalayan sojourn returned with reluctance to the 'heated plains where the crimson tide of barbarian conquests had rushed, and left behind the dregs of desolation.'[36] The Himalayas which supposedly 'emancipated' the Europeans from the dusty, dreary, hot and humid plains were also not comparable to the greater beauty and more appealing scale of the Alps. There was bleakness about the high Himalaya. The unbroken stillness of the peaks was 'death-like'.[37] J. D. Cunningham in the 1840s wrote about his daunting experience thus:

"*Hills of snow are heaped high upon heaps of snow, range retires beyond range, and naught relieves the drear and hoary waste or interferes with the awful stillness of the scene, save perhaps a dark and frowning precipice, or the voice of the blue river below, struggling with its fetters of rock and ice. In contemplating these vast solitudes, illuminated by the setting sun, the mind of man is for a moment raised, and he feels and admires their sublimity. The broad expanse of desolation wearies and appals; the fatal cold and the waning day recall other thoughts, and he turns silent and subdued to seek relief and sympathy among his fellow mortals, and in the ordinary occupations of life."*[38]

India was also wild because her customs, traditions, beliefs as well as religious practices were all incomprehensible to the English. The western onlooker was bewildered with what they encountered here. The 'horrors' associated with the Hindu 'superstition' in an equally 'deadly' and 'heathen' landscape appeared as wild as the jungles and

woodlands of India. The vernacular associations of India shocked the European sensibilities: the ghastly sight of Hindus disposing off their dead on the banks of the Ganges and other Hindu rituals appeared macabre. The river itself was splendid but the human squalor associated with it was appalling to the European eye hence it was not only the wild but the whole country needed to be transformed to make it more commensurate with the ways of the west. The evangelical movement used a very intense language against Hinduism and attacked it as a religion of gross superstition and extreme physical cruelty which allowed 'barbaric' practices like sati and infanticide.[39] Claudius Buchanan, a Calcutta chaplain expressed horror at what he saw in the temple town of Puri. While "appalled at the magnitude and horror of the spectacle" of the temple, he was no less disgusted by all that surrounded it. Puri was filled with "famished pilgrims, many of whom die on the streets from want or of disease." Outside the town, and scattered across the plains for fifty miles around this Indian "Golgotha" lay the rotting and dismembered corpses of dead pilgrims, with dogs and vultures picking at their bones. [40] There were innumerable such depressing sights in India. As the English ships navigated through the mud-banks, inundated forests and tangled vegetation of the Sundarbans to reach Calcutta they encountered a hostile land of deadly fevers, tigers and crocodiles. But more terrifying was the sight of Hindu devotees practising infanticide on the shores of the Sagar island, close to the entrance of the river Hugli. John Leyden, surgeon and linguist, poet and former collaborator of Sir William Scott, before his death in Java in 1811, wrote a grim set of verses about Sagar's "dreary isle, where crimson'd Ganga shines in blood, and man- devouring monsters swarm," "strange deeds of blood" were performed in honour of the "Dark Goddess" Kali.[41] The 'horrors' of Hinduism left a lasting impression on the minds of the early European travellers. The sight of corpses floating in the river Ganges, with vultures and alligators tearing at the bloated, rotting flesh, the spectacle of the sick and aged left to die on the banks of the holy river were so disturbing that the memories remained vivid long after the experience. India was the "darkened land" and this needed to change if the English were going to live here, it had to be made more conducive to their needs and made more habitable. The wildness had to yield to a more civilized place and so the task of improvement was taken up in right earnest.

The concept of "haunted India" too, emanated from this desire to emphasise the 'wildness' of the country. The "unnaturalness' of the natives who were outlandish, brutal, superstitious and vindictive was often used to explain the presence of the supernatural in Indian culture. The "exotic India", with its mysterious forests and hills, and deserted bungalows, provided the ideal settings for the existence of invisible spirits. The gallery of ghosts of the Raj had a wide variety — *churails*, *munjias*, *bhoots*, or mischievous *prets* and all helped in creating an eerie and haunted atmosphere. Perhaps the ghosts of India frightened the colonizer long before its people did, they felt threatened and helpless in the grip of the unknown dark world. All that was alien and defied western sensibilities

instilled a sense of fear and indignation among them. The mysteries of the "east" needed to be solved and this justified intervention.

But it is undeniable that though all of India appeared wild and uncivilized to the European eye, her jungles and woodlands seemed the wildest. Generally too, the word 'wild' conjures up the image of the wilderness and not the settled places, it was perhaps the last 'frontier' that needed to be penetrated and controlled and the colonial state's intrusion into this wilderness was so forceful and extensive that both flora as well as fauna suffered an unprecedented casualty. The woodlands suffered the wrath of the civilizing mission of the colonizers. Forests were cleared, fallows and wastelands reclaimed, animals slaughtered but by the 1850s and 60s the effects of the senseless killing of animals and large-scale destruction of forest cover began to be felt, pressures from within and outside began to mount to stem the damage and to take remedial measures, so, the colonial state now embarked on a mission to protect and preserve the woodlands. The same quest to 'improve' the wild landscape which led to clearing of forests to make way for agriculture or fell tress for timber and exterminate ferocious beasts and reptiles to make the country safer for human habitation also led them to initiate measures of protection. In fact the forest acts epitomize the colonial quest to transform India's woodlands into more ordered sites, i.e. transform jungles into forests. The forest acts helped the colonial endeavour to 'fence' the jungles, to dictate terms regarding the rights of access and use as well as take punitive measures against trespassers and violators of rules. An 'improved' landscape in this context meant a domain for exclusive use.

The attitudes to the wilderness were undergoing a sea change globally too, it was no longer perceived to be a dark and desolate terrain which aroused a sense of terror and fear but was seen as a site of Edenic perfection. In the United States of America the nineteenth century saw a change in the perception of the wilderness. In 1862, Henry David Thoreau famously declared, "*In Wildness is the preservation of the World*."[42] Wilderness had once been the antithesis of all that was orderly and good—it had been the darkness, one might say, on the far side of the garden wall—and yet now it was frequently likened to Eden itself. When John Muir arrived in the Sierra Nevada in 1869, he would declare, "*No description of Heaven that I have ever heard or read of seems half so fine*."[43] He was hardly alone in expressing such emotions. One by one, various corners of the American map came to be designated as sites whose wild beauty was so spectacular that a growing number of citizens had to visit and see them for themselves. Niagara Falls was the first to undergo this transformation, but it was soon followed by the Catskills, the Adirondacks, Yosemite, Yellowstone, and others. Yosemite was deeded by the U. S. government to the state of California in 1864 as the nation's first wild land park, and Yellowstone became the first true national park in 1872.[44] This change in the idea of the wilderness might have had an impact on the perception of the wilderness in colonial India too because it was from the mid-nineteenth century that the colonial power started

to initiate measures to preserve the country's woodlands.

The colonial intervention to 'civilize' the 'wild' had already started to take its toll; not only had large tracts of the wilderness transformed into arable but flora and fauna continued to face an uncontrolled assault by the colonizers which set alarm bells ringing in the mid-nineteenth century. The need to save nature in its pristine form intensified in the face of this crisis, India's woodlands were sought to be preserved by the passing of the first Indian Forest Act in 1865, other acts followed in the years to come. The initiatives came at individual levels as well. A few concerned individuals formed the Bombay Natural History Society, whose objective was to preserve India's flora and fauna. They tried within their limited means to influence policy decisions of the colonial government. There were the Planters' Associations who voiced their concerns about the depletion of flora and fauna as it jeopardized their interests but whatever their reasons they tried to prevail upon the colonial government to intervene and take steps to preserve the woodlands and animals. There were men like Jim Corbett and F.W. Champion who could be called the harbingers of change. Corbett played an instrumental role in persuading the provincial government to create India's first national park in 1935, though it was ironically named after Governor Malcolm Hailey who had gone out hunting and angling mahaseer in the very tract that became the park. The park was set up with the idea that the protection of tigers there would result in the increase of numbers and tigers would spill into the adjacent shooting bocks where hunting was legally permissible therefore in this case essentially the concern for nature rose out of the ethos of the hunt.[45]

However, the endeavour to preserve the wild which started with the passing of the Act of 1865 and culminated in setting up the Hailey National Park denied its original inhabitants the right of use and access, they were kept out by dint of force, their earlier uses of the land re-defined as inappropriate or even illegal. The 'wild' now became the exclusive domain of the colonizer, in a sense the concept of the 'wild' was a colonial construct used to consciously debar the colonized 'other' from this site. Once the wild was set aside within the fixed and carefully policed boundaries of the modern bureaucratic state, it was thought to become relatively less savage and perhaps safer: a place more of reverie than of revulsion or fear, an exclusive premise of the white sahib and their native collaborators, a place of recreation where leisure hunts could be pursued as well as a place of economic opportunities where timber and other forest products could be exclusively accessed. The 'fencing' of the woodlands was undertaken to make it more predictable, more like the 'forests' back 'home', where one could go out to hunt or just watch pristine nature in its unadulterated form. The desire was there but India's wilderness was a difficult terrain which was difficult to transform into the perfect 'Eden' of the colonial imagination.

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Chapter Two

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CHAPTER THREE

MAPPING THE WILD: THE CASE OF BENGAL

The 'Tropics' in European imagination registered through scenery, climate, vegetation, disease, animal life and human diversity[1] began to unfold in a kaleidoscopic manner, as the English ships navigated through the mud flats, innumerable water channels and dense and mysterious jungles of the Sundarbans and reached Lower Bengal. As in the rest of the sub-continent, Bengal too evoked contradictory responses from the English. On the one hand, they were enthralled by the idyllic tropics, places of Edenic plenitude and fecundity enlivened and elevated to the heights of wonder and enchantment[2] by the brilliant variety of its flora, fauna and its varied landscape, its gurgling streams, its mighty rivers, its fertile plains and lofty snow covered peaks and exotic people on the other, appalled by the intolerable heat and enervating humidity, the insects and pests, diseases, violent storms, savage nature, menacing crocodiles in rivers and prowling tigers in jungles and the 'superstitious and savage'[3] people.

Bengal presented in microcosm incredible India. The great diversity of India's natural world, its varied landscape, its different zones of climate and vegetation were all encountered here. The English soon realized that Bengal like the rest of India could not be typified as only 'tropical' as could the West Indies or Haiti or even Burma, Siam or Sumatra. The first impression of Bengal was depressing. The mud-banks, flooded forests and tangled vegetation of the Sundarbans, a land of deadly fever, of marauding tigers, man-eating crocodiles and noxious people who practiced infanticide in the Sagar islands appeared dreary and awful but beyond this dreadful region lay a 'perfect paradise' [4], a land with 'rich variegated foliage', 'groves of towering cocoa-palms' waving their 'feathery plumes in the breeze', 'richly scented air and brilliant sunshine' which aroused 'pleasurable sensations'.[5] But again this delight gave way to dismay. Travelling along the Damodar in western Bengal in December 1829, Victor Jacquemont, a Frenchman by birth but taken up by the Governor General, Lord Bentinck, recorded his first sighting of 'jungle'. He commented thus:

"*I must confess that I was greatly disappointed. I had imagined an impenetrable forest, offering the whole wealth of colour of tropical vegetation, bristling with thorny trees, intertwined with bushy shrubs, with creepers growing right up to the tops of the tallest trees and descending gracefully in cascades of flowers. But far from it! I found myself amongst woods even more monotonous than that of Europe....*" [6]

Moving up from the plains of Bengal the English experienced a landscape with which they had not been acquainted before, the Duars, the low lying swampy land, covered with thick vegetation, the home of magnificent sal trees but an extremely unhealthy land, the abode of deadly insects and ferocious beasts, the land of disease and death. But the area

had immense economic potential as they were to discover later. John. F. Gruning remarked:

"*Jalpaiguri has an unenviable reputation for fever; in the tract adjoining Dinajpur, a very serious type of malaria fever is prevalent, while in the Western Duars the dreaded black-water fever claims many victims, and seldom a year passes without several deaths among Europeans from that cause.*" [7]

However the lofty Himalayas further north with its salubrious climate, the pines and the deodars gave the English a feel of 'home' and often one finds them waxing eloquent about these mountains. Isabel Savory comments, '*Switzerland and the Alps are a little playground; the Himalayas are a world of their own.*'[8] The Darjeeling district was nature's treasure trove, the richness and variety of the vegetation of the district not to mention its teeming and varied fauna was impressive indeed.

BENGAL: THE LAND OF NATURAL DIVERSITY

The diversity of Bengal's natural world needs to be delved upon to give an insight into the English experience with this part of the world. Colonial linguistic Bengal encompassed most of the present day Indian state of West Bengal as also most of today's Bangladesh barring the native states. The region can broadly be divided into two parts, Lower Bengal and Northern Bengal but that would discount the areas of Bengal that were transferred to the new Province of Eastern Bengal and Assam during the Partition of Bengal in 1905. The study would thus take into account the vast repertoire of natural wealth of those areas that were incorporated into the new province. The Bengal District Gazetteers and the Eastern Bengal and Assam District Gazetteers give in depth accounts of the physical features and the flora and fauna of the period, though most of them were written in the early twentieth century when the jungles were either converted into arable or were transformed into well-ordered 'forests' still they do give a fair idea of that Bengal that was first encountered by the English. Their bewilderment and enchantment of coming into contact with such an diverse array of natural features, from the mighty rivers to the seasonal streams, the khals and bils and marshlands, the ever shifting chars, the creeks and islands, the rolling hills, the swaying fields, the mighty Himalayas and the plateau of the Manbhum region can be clearly understood when these Gazetteers are studied. The Gazetteers can also be seen as an effort by the colonial authorities to take up a detailed study of the region and create a knowledge bank which would facilitate their endeavour to extend their control and command over this region.

LOWER BENGAL

The region comprised of the districts of Jessore, Khulna, 24 Parganas, Calcutta, Howrah, Hugli, Midnapore, Burdwan, Birbhum, Bankura, Manbhum, Murshidabad and Nadia. Deltaic Bengal is interspersed with rivers and numerous water channels, swamps and shallows occur extensively and the alluvium brought down by the rivers make the area extremely fertile. However in spite of these similarities there exist many differences within this sub area, in the topography, physical features, settlement patterns and land use not to mention flora and fauna which the English were to discover in course of their rule. The lowest part of the delta formed by the Ganga, Jamuna- Brahmaputra and the Meghna rivers is known as the Sunderbans where the world's largest mangrove forest lies and which has always been synonymous with fear and anxiety. The diverse and unique nature of this land continued to appal and enthral them.

JESSORE

The district of Jessore was a part of the Presidency Division and lay between the delta of the Hooghly and the Padma. It consisted of a wide alluvial plain intersected by numerous rivers, which again were connected by interlacing cross-channels, called khāls. Most of the rivers, here had silted up, losing their connection with the parent stream and becoming year by year more shallow, the result being that, for the greater part of the year, their channels contained no flowing water, but a series of stagnant pools, which were flushed only in the rains. In the south, however, where the country merged into the swamps of the lower delta, the rivers were tidal and not dependent for their supply on the Ganges floods. Proceeding from west to east, four great rivers took off from the Ganges in this part of the delta, viz., the Bhāgīrathī, the Jalangī, the Mātābhāngā, and the Garāi, which in its lower reaches was known as the Madhumati.

The indigenous flora comprised the babul and the banyan, pipal, tamarind, and mulberry. The north and west of the district were dotted with numerous groves of date-palms, date-palms were especially numerous in the western half of the Jessore Bangaon and Jhenida subdivisions, which had been described as 'the date garden of Bengal'.

When the English came to this area wild buffaloes were common as were leopards, wolves, wild pigs, jackals, foxes, porcupines and wild cat. Game birds abounded in the numerous water-bodies and marshes of the district. L.S.S.O'Malley wrote:

"*Fifty years ago wild buffaloes were hunted in the Jhenida subdivision by Europeans on horse-back, but have now entirely disappeared. Tigers are also extinct, and though old reports speak of wolves in the district, none are now to be found. Leopards however are found all over the district, and are especially numerous in the jungles of the Bangāon and Jhenida subdivisions. Wild pigs are very common in the higher and less accessible parts of the district. Jackals are very common and with*

vultures do useful scavengers work. Foxes are also fairly numerous. Porcupines and the wild cat called khatāsh are found in smaller numbers.

Among game birds may be mentioned partridge and quail. Wild ducks, geese, snipe and teal, etc., are found in the bils and baors which are numerous in the district. In the cold weather the bils or marshes teem with wild fowl from the ponderous and somber-hued grey goose to the light and bright-plumaged blue-winged teal."

The rivers, marshes and tanks in the district abounded in innumerable varieties of fish like rui, kātlā, mrigel, baush, bhetki, boāl, ār, dhain and chital among larger fish, and kai, magur, singi,bāchā, pābdā, tengrā, khairā, puti, maya, etc., among smaller fish. The hilsā was found in the Ichhāmatī, as well as in the Madhumatī or Garāi, Nabaganga and Chitra.[9]

KHULNA

The district of Khulna formed the extreme south east portion of the Presidency Division of the Province of Bengal. Taken as a whole, Khulna, was a low-lying fen country, occupying the central portion of the Southern delta between Hooghly and Meghna estuary and intersected by a large number of rivers and estuaries, which again were connected by innumerable interlacing cross-channels. The country was flat, the banks of rivers higher than the adjacent land, so that the land sloping away from them on either side formed a series of depression between their courses and there were numerous marshes and large tracts were swampy. The southern part of the district was part of the Sundarbans and was covered with swamps, ending towards the coast in a network of sluggish channels and backwaters. This was a landscape which was not only unfamiliar but incomprehensible to the unaccustomed eye of the English. This tract was intersected throughout by large rivers and estuaries running from north to south. Between the larger rivers and estuaries, were numerous streams and watercourses, called khals, forming a perfect network of channels and ending ultimately in little creeks which served to drain off the water from depressions between the larger rivers. The whole country (Sundarbans) was in fact a labyrinth of rivers and watercourses, connected by innumerable distributaries, which, after endless bifurcations and inter lacings, united into large estuaries falling into the Bay of Bengal.

The sea coast fringed by a belt of low-lying swamp and uninhabited jungle extended for miles inland. The whole coast was full of breakers and consequently difficult to approach except by a few tortuous channels. It was intersected by numerous estuaries whose mouths are often obstructed by sandbars, which effectually prevented the passage of vessels of any size. This land was indeed difficult terrain and had peculiar vegetation consisting of two types of palms: the Nipa fruit canes in the swamps and the river banks and the Phoenix palmdosa in drier localities, two species completely unknown to the English. There was other estuarine vegetation too which were unfamiliar to the European eye. The flat swampy islands, surrounded by interlacing creeks and

channels in the lower Delta, were covered by dense forest. The most plentiful and important species was the sundari. In the swamp forests the sundari and its associates largely disappeared and were composed mainly of geoa. Nearer the sea the geoa in turn disappeared, and the forest was almost exclusively composed of mangroves. This pure mangrove forest sometimes extended into the tides but at other times was separated from the waves along the sea face by a line of low sand, hills on which reappeared some of the swamp forest species.

This terrain abounded with wild animals and included the ubiquitious tiger, leopards, rhinoceros, wild buffalo, wild pig, wild cat, deer, porcupines, and monkeys. These animals were found for the most part in the Sundarbans to the south and were comparatively scarce in the north. The rhino was commonly found in the eighteenth century as Alexander Hamilton, writing of the Sundarbans in 1727, described them as containing many of these animals. Even as late as 1859 the country at the mouth of the Malancha and Raimangal rivers was said to have been infested by rhinos and deer. Tigers, however were exceptionally numerous, and many of them were man-eaters, according to O'Malley; whether they were actually man-eaters or were forced to turn into the same due to increasing incursions into their territory is a matter of debate but they were scourges, feared and thereby sought to be killed at the first opportunity. Leopards are also numerous in the Sundarbans and in the newly reclaimed land, where they took up their quarters in thickets near human habitations and carried off cattle and other animals. Wild pigs were also numerous and destructive to crops and deer also did great damage in November and December when they came in hordes to feast on the young paddy that grew in the deltaic region – they included spotted deer, hog deer, barking deer.

The region abounded in birds. Game birds included wild goose, wild duck, cranes, jungle fowl, snipe, partridge and numerous water fowl which were common in the Sundarbans and the large bils situated in the interior. Among other birds the most famous was, the adjunant which was of two kinds, one the common Ardea gigantea, the other the maralsout adjunant, from which was obtained the beautiful feathers bearing that name. There were fishing and other eagles, vultures, kites, hawks, owls, mainas, doves, parroqutes, fly-catchers, orioles, woodpecks, sandpipers, egrets, waders, small and large spoonbills, pelicans, storks, paddy birds, herons etc. The region had a remarkable avian life.

This land of the rivers, creeks, estuaries, bils and mud flats had another danger lurking in their midst; crocodiles. Sharks, also, were by no means uncommon in the larger streams and estuaries. The district was also an anglers paradise, its water-bodies abounded with a large variety of fish. [10]

24 PARGANAS

The 24-Parganas lying within the limits of the Gangetic delta comprised two divisions with very different characteristics, viz, the northern inland tract, which was a

fairly well raised delta land of old formation and the low lying Sundarbans towards the sea board on the south. The northern tract was a land of sluggish or stagnant rivers whose beds were out of reach of the scour of the tides. The division which formed a part of the Sundarbans, on the other hand, were a network of tidal channels, rivers, creeks and islands. Some of these islands were mere swampy morasses, covered with low forest and scrub-wood jungle. This seaboard area was a typical specimen of new deltaic formation which exhibited the process of land-making in an unfinished state, and presented the last stage in the life of a great river. The district was criss crossed by rivers, the principal rivers being the Hooghly, Bidyadhari, Piali and Jamuna, but practically each river formed the centre of a minor system of interlacing distributaries of its own. There were innumerable other rivers, and estuaries and islands were also present here. The main islands being the Sagar Island, Mecklenberg Island later renamed as Fraserganj, Lothian Island, Halliday Island etc. Between the large estuaries and rivers were innumerable streams and water courses, called khals, forming a perfect network of channels and the district was studded with large swamps and marshes.

The natural vegetation comprised numerous marsh species and in the Sundarbans, the Sundari and geoa prevailed. This was tiger country and one Mr. F. B. Bradley-Birt, I.C.S recounted that in the Sundarbans it was impossible to land anywhere in that tract without coming across the pugs, or foot-prints, of that animal. The Sunderban tiger had adapted to its habitat and were expert swimmers crossing the khals and the rivers and preying on deer that abounded in the region. The other animals which were plentiful were the barking deer, hog deer, wild pig, panther, the fishing cat, civet cat, palm cat, mongoose, jackal, fox and monkeys. The avian life was varied but game birds were few, only the jungle fowl was found here. But geese, mallards, pochars teal, pintail, gadwall etc. were common in the Sagar Island. The snipe, golden plover, curlew, kites, hawks, mainas, golden orioles, sandpipers, egrets, plovers, waders, pelicans, herons, owls, doves, crows, woodpeckers, jays and other small birds were also seen.

Fish were plentiful; the varieties commonly found in the Sundarbans were the bhekti, hilsa, tapsi, bhangan, kan-magur, rekha, ruche, chitra or bisatara, parse, tengra, banspata, ditnia, magur and kai. The ‘kumbhir’, or marsh crocodile, was found in tanks, jhils and the upper reaches of all the rivers in the district. The larger animals attacked man. Another species, the estuarine crocodile (C. porosus), inhabited the lower reaches of the rivers right up to sea face and were believed to be man-eating crocodiles. The snub-nosed crocodile (incorrectly called an alligator) were seen in large numbers along banks of streams, especially during the cold weather.[11]

NADIA

The district of Nadia formed the north-eastern portion of the Presidency Division. It was a flat country and the general aspect of it was a vast level alluvial plain, dotted

with villages and clusters of trees and intersected by numerous rivers, back waters, minor streams and swamps.

The whole district was a net work of moribund rivers and streams, but the Bhagirathi, the Jalangi and the Matabhanga were the three which were known as the "Nadia Rivers". The Padma impinged on the district at its most northerly corner, at the point where it threw off the Jalangi, and flowed along the northern border in a direction slightly south of east. Other rivers were Jalangi, Bhirab, Bhagirathi, Matabhanga, Churni, Ichhamati, Kabadak, Ga rai. The district also has a number of lakes and marshes.

The stretches of low-lying land afforded a foothold for many marsh species, while the numerous ponds and ditches are filled with submerged and floating water plants. The edges of sluggish creeks were lined with large sedges and bulrushes, and the banks of rivers frequently had a hedge-like shrub jungle. The sides of embankments and village sites, where not occupied by human habitations, were densely covered with large growths of semi-spontaneous vegetation, often interspersed with clumps of planted bamboos, and groves of Areca, Moringa, Mangifera, and Anona. Waysides and waste places were filled with grasses and weeds, usually of little intrinsic interest, but sometimes striking because of their distribution.

At the beginning of the nineteenth century tigers were common in the more sparsely inhabited portions of the district near the Bhagirathi, their depredations was reported from Chakdaha. However in due course these animals disappeared, and were confined to the areas near the Sundarbans. Leopards, however, were fairly common, especially in the Meherpur and Kushtia subdivisions and they did a good deal of damage to goats and young cattles, as well as killed one or two human beings yearly. Wild hogs were common, especially where protected for the purpose of pig-sticking. Among lesser fauna were foxes, hares and porcupines. Monkeys (the black-faced Hanumans or langurs) were numerous and destructive. Jackals are credited with carrying off about 100 infants yearly, and many cases of hydrophobia were caused by their bites. Crocodiles were fairly common, especially in the Garai and other rivers in the north of the district, and they occasionally killed human beings.

Of game-birds, the florican used to breed on the fields of Plassey, but later deserted them. Snipe were very common in the south of the district during the latter part of the rains and the beginning of the cold weather. Various kinds of wild ducks and other aquatic birds were found in large numbers in the east and north of the district during the cold weather, and wild geese were common in the Padma. A few partridge and quail were occasionally met with. Snakes were common, and accounted for some 400 deaths annually.

Fish abounded in most of the rivers and bils, and very large catches of hilsa were made in the Padma during the rainy season. [12]

MURSHIDABAD

Murshidabad was the north-western district of the Presidency Division or Commissionership. The river Bhagirathi, flowing from north to south through the district, divided it into two almost equal portions, the tract to the west of the river was locally known as Rarh, and the tract to the east as Bagri. The western tract, or Rarh, consisted of lateritic clay and nodular limestone. The land was, high and slightly undulating, but was interspersed with numerous swamps and beds of old rivers. The tract called the Hijal, situated in the south-west of the district near the confluence of the Mor and Dwarka, offered a very different aspect. The country became more open, and, in place of rice fields, large stretches of thatching grass covered an almost treeless plain. Village sites here were few, and there was a marked absence of forest growth. The Bagri, or eastern tract, differed in no material respects from the ordinary alluvial plains of Bengal. It lay almost entirely between the Ganges, Bhagirathi and Jalangi rivers, and was permeated by several other off-shoots of the great river.

Rivers of the district comprised of the Ganges or Padma, Bhagirathi, Bhairab, Jalangi, Sialmari, Gobra Nullah, Bansloi and Dwarka or Babla. Among minor rivers could be mentioned the Brahmi, the Mor (or Maurakhi or Kana) and the Kuiya and there were many small lakes or lagoons, commonly called bils or jhils, most of which were the remnants of old river beds. The best known of these is the Motijhil, or Pearl Lake, a fine horse-shoe lake about two miles from the town of Mushidabad, which has been formed by a change in the course of the Bhagirathi.

The botanical features of Murshidabad were those characteristic of the deltaic districts of Central Bengal. The swamps afford a foothold for numerous marsh species, while ponds and ditches are filled with submerged and floating water plants. The edges of sluggish creeks are lined with sedges and bulrushes, and the banks of rivers have a hedge-like scrub jungle. The country was on the whole well wooded with mango groves, bamboo clumps and banyan, papal, babul, bel, jack, tamarind, coconut and date-palm trees.

In about the middle of the nineteenth century, Colonel Gastrell remarked in his Statistical and Geographical Report on Murshidabad (1857): “The advance of cultivation is rapidly driving the wild animals away. All are becoming more and more scarce, and but little sport is met now to be found in the district.” By the early twentieth century leopards were found in some parts, more particularly in the Jalangi thana (eg. at Khayramari) and in the neighbourhood of Murshidabad, where they could find cover in abandoned gardens and ruinous country houses. In the Kandi and Jangipur sub-divisions, where there was scarcely any heavy jungle left, they had practically disappeared, and only a stray leopard was occasionally seen. Wolves, however, were sometimes found in the Kandi sub-division, where they did some damage to sheep and goats. Jackals were ubiquitious, and had an evil reputation for carrying off and devouring infants, more especially in the Jangipur subdivision. Wild pigs were plentiful in the Bagri and along the

chars of the Ganges, and also in the Hariharpara thana. Monkeys (the black-faced Hanuman or langurs) were numerous and destructive in towns, where they did much damage in gardens and orchards and to the mango crop when it was ripening.

The game birds of the district consisted of snipe, wild duck, quail, partridge, pigeon, teal and geese. During the cold weather good sport could be obtained with snipe, duck ,teal and geese on the bils, more especially the Jalangi and Telkar Bils ; among ducks and pintail, pochard and gadwall, and among teal, the painted, blue-winged and cotton are common. All the usual waders were also met with.

The common varieties of snakes, such as cobras, karaits, etc., were found; the mortality from snake-bite was considerable in years of flood, when they are driven to dry ground in the vicinity of villages and homesteads. Crocodiles were fairly common in the rivers and in the swamps or bils; they were also met with in tanks in the Jangipur subdivision.

The more valuable fish caught in the rivers, bils and tanks belonged to the carp family (Cyprinidæ), such as ruhi, katla, mirgal, etc., or were Siluridæ, such as boail and magur. Large catches of hilsa were made in the Padma or Ganges.[13]

BIRBHUM

Birbhum was the northernmost district of the Burdwan Division. A suggestion is that it signifies forest land, bir in Santali means jungle. Throughout almost the entire area of the district the surface was broken by a succession of undulations, the general trend of which was north-west to south-east. Near the western boundary they rose into high ridges of laterite, separated by valleys a mile or more in width. To the south east these upland ridges were less pronounced, while the valleys become narrower and gradually merged into the broad alluvial plains of the Gangetic delta. The larger ridges were covered with thick but stunted sal forest, only the bottom of the valleys was cultivated. The rapidity with which hills changed to ridges, ridges to undulations and undulations to level country varied considerably.

In the eastern portion, the vegetation was characteristic of rice fields in Bengal generally; aquatic or palustrine genera being abundant. In the drier undulating country to the west there were shrubs and herbs that grews on laterite soil. Around villages were the usual clumps of mango trees, palms, bamboos and other trees, among which species of the fig family jack and arjun (Terminalia arjuna) were often present. On the borders of the Santhal Parganas the remains of forest were found containing sal, piar (Buchanania latifolia), dhan (Anogeissus latifolia), kend (Diospyros melanoxylon) and mahua (Bassia latifolia). This area in about the middle of the eighteenth century was a thick jungle of waving plains of grass. The district was well drained by a number of rivers and rivulets running in nearly every case from west to east with a slight southerly inclination. Only two rivers of any magnitude viz. the Mor and the Ajai flowed over the district.

The carnivora of the district consisted of leopards, bears, wolves and other similar species. The ungualata were represented by wild pigs. Leopards and bears were very rare but sometimes they migrated from the neighbouring hills in the Santal Parganas. Wild pigs were found in isolated tracts, especially along river banks and in jungles traversed by water-courses. Besides them, the long-tailed ape called Hanuman, other, hares, foxes and jackals were common; in some parts of the district.

The birds chiefly consisted of partridges, green pigeons and various water fowl. The grey partridge was plentiful and green pigeons were usually seen on the highest branches of pipal trees when they bore fruit. Among water-fowl, comb and Brahmani ducks were found in abundance. Geese visited in cold weather and came in large flocks to feed on the rice crops. Snipe were found in great numbers in swampy places and in the beds of rivers, and were most common in the east of the district.

The principal rivers of the district the Ajai and the Mor, contained rui, katla and sometimes hilsa. Tanks which were numerous in the district are stocked with rui, katla, mirgel, magur, koi and other small fish. Alligators were seen in tanks near Mayureswar.[14]

BANKURA

Bankura was the western most district of the Burdwan Division. The district consisted of two distinct tracts. The western portion marked the first step of the gradual descent from the tableland of Chotā Nāgpur to the delta of Lower Bengal, consisting as it did, in great measure, of the spurs projecting from the western tableland and of low swelling ridges of laterite. In the central portion of the district the country was more open and consisted of a series of rolling downs, which eventually merged with the alluvial plain formed by the silt brought down by the great Gangetic rivers. The difference between the deltaic tract to the east and the rolling uplands and isolated hills to the west has been well described by Sir William Hunter, who wrote :- "In Bānkurā the alluvial flats end in the undulations, isolated peaks, and short, low ranges which form the advanced guard of the hill system of the central Indian plateau. A poor, ferruginous soil and hard beds of laterite here take the place of the fertile deltaic detritus, with expanses of scrub-jungle and sāl woods for the closely-tilled village lands of the east. Instead of a wealthy and well-educated population of Hindus and Muhammadans, the western tract is comparatively thinly inhabited by races or castes of a less advanced type, and into whose constitution the aboriginal or semi-Hinduized element strongly enters."

In the eastern portion of the district, and in the tracts adjoining the Damodar river, the scenery on the whole appeared tame and monotonous to the English, for the eye constantly rested on wide expanses of rice fields, green in the rains but parched and dry in the hot weather. These fields, however, were fringed round by villages, encircled by clumps of bamboos, mango groves, plantain gardens and palm trees, which had a quiet beauty of their own and relieved the monotony of the scenery. Leaving the alluvial flats, the ground gradually became more broken, more elevated, and at the same time less

cultivated. Rocks cropped out, and small boulder-covered knolls made their appearance. Long broken ridges were either bare or covered by low jungle. During the hot weather the dry red soil and scarcity of trees gave this part of the country a scorched and dreary appearance, but in the rains the fresh green of the young rice and the foliage of the scrub-jungle formed attractive contrasts of colouring. The scenery in this part of the district had a distinctly park-like aspect. A traveller suddenly brought here might almost imagine himself transported to some English park, and in other places was agreeably surprised to find a long vista of trees stretching along a red laterite road, which passed into the hollows and again mounted the slopes.

The hills of the district consisted of the outliers of the Chotā Nagpur plateau, and only two are of any great height, viz., Susunia and Biharinath. There are several low hills in the Sāltorā outpost in the north-west, but the only other hills in this part of the district that called for separate mention are Mejiā and Korā (or Karo, also called Kanra). To the south in thanas Khatra and Raipur were a number of low but picturesque hills.

The district was bounded on the north by the Dāmodar river and intersected by a number of rivers flowing from north-west to south-east in courses roughly parallel to one another. The chief tributary of the Damodar was the Sali. Of the other rivers flowing through Bānkura the most important were the Dhalkisor or Dwarkeswar. During its course through the district the Dhalkisor received many tributaries, the principal of which were the Gandheswari, the Kukhra and the Birai, all small streams with Bāmandihi in Khātrā. There was also a minor river in Raipur thāna called the Bhairabbānki. There were no natural lakes or canals or artificial watercourses in the district, expect an artificial channel, called the Subhankarī Khal.

The uplands were still covered in many parts with wide stretches of low scrub-jungle or of young sāl saplings, with occasionally dense thorny undergrowth in the early twentieth century. In the west and south, trees of larger growth were found.

The eastern portion of the district formed part of the rice plains of Western Bengal, and land under rice cultivation contained the usual marsh weeds of the Gangetic plain. On the ponds, ditches and still streams, floated aquatic plants, accompanied by many submerged water weeds. Some species of figs, most notably the pīpal and banyan, with the red cotton tree, mango and jiyal, made up the arbores cent part of the thickets, in which Phænix dactylifera and Borassus flabellifer were often present in considerable quantities. Roadsides were often clothed with a swath of short grasses, and open glades with taller grasses of a course character, while in dry places there were several kinds of grasses peculiar to dry regions that have wandered from the west to this district. The rest of the district was higher, and here the uplands were bare or covered with a scrub-jungle of Zizyphus and other thorny shrubs. This scrub-jungle gradually merged into forest, where sal was gregarious, while the low hills were covered by a mixed forest containing species of Miliusa, Schleichera, Diospyros and other trees. The asan, the babul, the bair,

the bel, the dhaman tree, the gab tree, the mahua, the palas, the kend and the jiyal tree were common.

According to a report furnished by the District Officer, tigers still occasionally frequented the jungles at Saltora in the north-west and in the Raipur than to the south-west even in the early twentieth century. Leopards, wild bear and hyænas were said to be found in the jungles at Barsingha, Satgachi, Manikbazar and Bansi in the Jayrāampur outpost; at Hatbari, Krishnaganj, Jadabnagar and Jirmohan in the Kotalpur thana; at Belband, Belsulia and Kamarpokhur in the Bishnupur thana; in the low jungle-clad hills of thana Raipur; at Saulia, Jaykrishnapur, Dhabanī and Beliatore in the Barjorā outpost ; at Siālpāhārī, Kochdānga, Dhansimla and Dhandol in the Sonamukhi than ; and in the jungles to the south of the Taldangra outpost. Spotted deer were reported to have their habitat at the Tura hill and in the jungles of Jhari, Talghari and Dubrajpur in thana Raipur. However, that there were no well-authenticated instances of tiger being found in the district since the early sixties of the nineteenth century, and that the natives often used the term bara bagh for large leopards or panthers, which were still plentiful in parts of the district. Wild elephants were formerly fairly numerous, but had disappeared by the early twentieth century. The common black or sloth bear was still fairly plentiful. Leopards were still found. Among other carnivorous animals the following were fairly common:- hyænas, jackals, fox, civet cats, and wild cats of several species, as well as the ubiquitous mongoose. Wild pig and wolves were rarer, but were occasionally met with, and wild dogs were still more uncommon. Deer were rare, and could only be found in the extreme west, on the borders of the Manbhum, where a few spotted, hog, barking, ravine, and dwarf deer were occasionally seen, but the noble sambar seldom, if ever.

Pea-fowl were still fairly numerous in some parts of the district. Among other game birds were grey and black partridge, jungle fowl, quail, pigeons and an occasional lesser florican. On the Damodar and Kasai rivers several species of wild goose, duck snipe and ordinary water-fowl were found in fair numbers. Other common birds were those usually met with in other parts of Bengal, ranging from the vulture and fish-eagle to the bulbul, sparrow, honey-sucker, and other birds.

The fish found in Bānkurā were the common ones met with in other parts of Bengal and are mostly caught in tanks or irrigation reservoirs. The most common species were the rui, mirgel and kātlā. Large prawns were caught in the shallows of the rivers.

Snakes were not very numerous, but several varieties are found, including the cobra and karait (Bungarus coeruleus), the dhāman, which grows to a large size, an occasional python in the hilly and rocky parts, and the ordinary grass and other harmless snakes.[15]

MANBHUM

The district of Manbhum formed the eastern part of the Chota Nagpur Division. The district took its name from one of its most easterly Parganas, at the chief place in

which, Manbazar or Manbhum Khas, was the head-quarters of the jungle Mahals district from 1833 to 1838, in the earlier of which years the Manbhum district was constituted.

The district had been described as the first step of a gradual descent from the table land of Chota Nagpur to the Delta of Lower Bengal; more properly it was the last step in the descent of the great elevated high lands of Central India, the Chota Nagpur plateau with its general elevation of 2000 to 2500 feet forming the intermediate stage. The general characteristics were those of an upland district, consisting, as it did, in great measure, of metamorphic rocks, spurs projected from the table land on the west, and swelling ridges of laterite. Towards the east, as the metamorphic rocks thinned out, the laterite ridges thickened, the undulations so characteristic of Chota Nagpur were less pronounced.

In the adjoining Pargana of Jhalda, there began a series of isolated groups of hills and isolated peaks, some of them of considerable elevation, which still further south formed a regular range known as the Baghmundi or Ajodhya range, which in places reached an elevation of over 2000 feet and formed the water-shed between the Subarnarekha and the Kasai rivers. This range, which was rather a plateau of considerable extent, on which there are a number of flourishing villages, than a mere range of hills, ended somewhat abruptly in Pargana Matha.

Practically continuous with the last, save for the very narrow valley of the Subarnarekha, was another range extending along the Singhbhum boundary known by the name of its highest peak, Dalma. Of picturesque scenery the more level portions furnished but little in the dry months of the year except where the Parashnath or Tundi ranges in the north, the Baghmundi range in the centre and west, and Dalma in the south gave a striking background to the picture. There was a general absence of trees in this part of the country and the fact that cultivation was almost entirely confined to the rice crop, gave in the dry season the general appearance of a barren waste. In the rains the prospect was more pleasing when the fresh green of the young rice shaded off into the darker greens of the grass which sprang up everywhere when the first showers fell, and contrasted with the browns of the ripening crops on the high lands, and of the bare gravel ridges, varied here and there by the black masses of exposed rock. These effects were naturally enhanced when the hills give a background of mingled jungle growth and enormous masses of rock of quaint shapes and varying shades of colour. In the early hot weather, the jungle-covered areas, whether in the hills or in the plain, presented for a time a brilliant spectacle, the red blossom of the palas contrasting in striking fashion with the fresh green of the new leaves. Generally it may be said of the district that, from the point of view of the picturesque, the seasons of the new leaves and the palas blossom, that is to say the early hot weather, and of the young rice, August-September, were the two most favourable; of the constantly picturesque and of the grand there was little or none in comparison with the more favoured high lands to the west. Highest within the district was the crowning peak of the Dalma range (3,407 feet). The slopes of the hills were still

covered with dense jungle in the early twentieth century. Manbhum appeared picturesque as it contained spots of romantic loveliness; to the English the Bengal countryside did occasionally offer grand, romantic vistas.

Following the natural slope of the district all the rivers which intersected or took their rise within it, had an easterly or south-easterly course. The important rivers were the Barakhar, Damodar, Dhalkisor and Silai, Kasai, Subarnarekha etc.

By the early twentieth century only a comparatively limited area, namely, along the hill ranges to the north-west, south and south-west of the district, that Manbhum could be described as a well wooded country, and even in these parts denudation had gone on to such an extent that the amount of large timber left, except in the most inaccessible places, was very small.

Of the four sections, therefore, into which Mr. V. Ball in 1869 divided the district, the first, i.e., "original jungle lands in which trees are of large size" had almost entirely disappeared. The second "stunted jungle land from which timber is regularly cut, and where the trees are never allowed to attain respectable dimensions" described accurately the bulk of the jungle that had survived. The third and fourth classes, "dry, gravelly and rocky ground cut up by ravines, incapable of supporting a tree cultivation", and 'land under cultivation" had proportionately increased; the former, owing to the practice of "jhuming" or bringing under cultivation jungle areas.

Mr. Ball gives us among the most characteristic trees in his first division the Sal, Asan, Kusum, Kend and Piar. On the higher hills the bamboo as a rule took the place of the other trees. Herbaceous plants were comparatively scarce, but there were numerous large scented creepers among which the Butea superb with its magnificent orange-red flowers, and the Bauhinia Vahlii were the most conspicuous; parasites and epiphytes are represented by several species of loranthus and of orchids. Mr. Ball's second and third divisions had no very characteristic vegetation; stunted sal, the result of cutting the original too high from the ground, the palas and various grasses and more or less dwarfed bushes of different species formed the ordinary vegetation; in the area nearer the hills the general appearance of open forest or park like country was preserved by the presence of numerous mahua. These, as well as palas besides the various fig trees, the mango, bair, nim or plum tree, jamun and jack with very occasional date palms, were the principal varieties found in and near the cultivated tracts. The doctrine of 'improvement' which was well established by the 1820s and 1830s had taken its toll on the flora of the district.

The district which had teemed with wild animals had by the turn of the twentieth century become singularly destitute of wild animals and games of all descriptions. The causes are not far to seek; cultivation and the clearing of jungles for this purpose had widely extended during the last decade of the nineteenth and the first decade of the twentieth century. The larger game that were still occasionally seen and shot were a stray tiger or two, leopards (Felis pardus) were somewhat less rare in the same areas, and were also met with at times in the jungles which ran up the banks of the Kasai river through

Parganas Manbhum and Kasaipur. A very occasional tiger, was found on the Tundi range and the foothills of Parashnath in the north. Other felines were represented by two or more varieties of wild cat, specimens of which though rarely seen were probably fairly numerous. The bear – the common black or sloth bear – was rather more common, and was still to be found in most of the wooded hills on the north, west and south of the district. Wolves were said to be fairly numerous on and near the Panchet hills. Hyænas were to found in the same region. Jackals were numerous, but not nearly so common as might be expected from the general appearance of the country. Of herbivorous quadrupeds the sambar was almost extinct except on the Parashnath and Dalma ranges where occasional specimens were seen. The barking deer was found occasionally in the same areas. The four-horned antelope was also found. Wild pigs were rarely to be found except in the dense jungles adjoining the Parashnath and Dalma ranges. The Indian Fox was common throughout the district. The short-tailed Indian pangolin (Manis crassicaudata) an animal almost peculiar to this and the Singhbhum district of which a picturesque account was given in Hunter's Statistical Account of the district was rarely seen. Hares were very rare except where there are large areas of scrub jungles and broken ground, their habits making them a very easy prey for the aboriginal tribes.

The game birds of Manbhum were few in number and variety; jungle spur and pea fowl could be rarely found by the first half of the twentieth century and that too only in the wildest parts of the district; the grey partridge was fairly common in suitable country, the black was only very occasionally seen. Pigeon, both rock and green, were fairly common. Of cold weather visitors, the snipe was the most numerous, and from November till May a wisp or two could usually be found in the rice fields immediately below most bandhs. Towards the end of the season when suitable grounds were less numerous and of smaller area it was possible to get a fair bag. Wild geese resorted regularly to the beds of the larger rivers, the Damodar, Kasai and Subarnarekha, and a fair number of duck and teal were to be found on the larger bandhs throughout the district particularly in the later months of the season. The most common varieties were the common or the blue winged teal, the pintail, the white-eyed, common and red-crested pochards, the gadwall and the shoveller ; whistling teal both great and lesser were found occasionally and a fair number of cotton teal stayed through the year on some of the larger tanks, near which there was cover for their breeding. Golden plovers were seen occasionally in considerable flights on the high *tanr* lands where also the common plover was fairly common. Of other birds the most common were the crow, the maina, the sparrow and the paddy-bird.

Many of the tanks and irrigation bandhs were regularly stocked with fry of the rui, mirgel and katla species, and various small species were to be found in almost every piece of water. Hilsa and Bachua were caught in the Damodar and Subarnarekha during the rains and both these rivers were said to contain mahseer.

Snakes were not especially numerous; of the poisonous varieties the cobra and the karait are fairly common; of others the most frequently seen was the Dhaman. In the hilly areas, an occasional python was met with; and various harmless and grass snakes were generally common. [16]

HOWRAH

The district of Howrah was situated in the south west of Burdwan. In general shape, the district of Howrah was an irregular triangle bounded on the two sides by great rivers. In the interior the country was broken up into extensive swamps or depressions, which formed a vast sheet of water in the rains. The chief rivers were the Hooghly and its branch the Saraswati. The Damodar had two branches, the Kana Damodar or Kansiki and the Old Damodar and the Rupnarayan. The district was also interspersed by numerous tributaries or effluents of the main rivers, which were generally called Khals or creeks. The Hooghly was the main westerly channel by which the rivers of the Ganges entered the Bay of Bengal, its easterly channel being the Padma, formed by the confluence of the Bhagirathi, the Jalangi and Matabhanga. Accretions (chars) had been formed at various places on the Howrah side of the river, eg. at Ghusuri, Shibpur, Ramkritapur, Sarenga and Uluberia.

The natural vegetation was composed almost exclusively of the aquatic and marsh plants to be met with in the alluvial rice fields of Bengal. Wild animals were scarce. One or two leopards had been reported. Wild pigs abounded in parts of the Uluberia sub-division and a few were found in the Jagatballabpur thana. Crocodiles were sometimes to be seen on the banks of the Hooghly and Damodar rivers. In the cold weather snipes of two or three varieties were fairly common in the paddy fields of Dumjor, Sankrail and Jagatballabpur thanas and also in the Uluberia sub-division. The common whistling and cotton teal were found in fair numbers in the flooded area between Maju and Anita and sometimes two or three commoner varieties of ducks. The principal varieties of the river fish netted in the Hooghly river were the hilsa, bhetki, tengra and during the season tapsi or the mango fish. Walter Hamilton (1820) called it – "as the best and highest flavoured fish not only in Bengal but in the whole world."[17]

HOOGHLY

The district of Hooghly formed part of the Burdwan divison. The name of the district was derived from the Hogla plant. The scenery on the upper reaches of the Hooghly had a quiet, if somewhat monotonous beauty, its banks being lined with huts, orchards, white washed houses and temples , interspersed with clumps of bamboos , palms, and other trees. The district was mainly the product of its rivers and was well watered, drained and partially changed by them. The large rivers were four in number – the Hooghly, Damodar, Dwarakeswar and Rupnarayan. The smaller streams as a rule, flowed from north to south, among them may be mentioned the Behula, the Kana nadi, the Kunti nadi, the Saraswati, the Kansiki, the Kantul with the Gopalnagar, the Khia with

the Julka, the Kana Damodar, the Madaria, the Besia or Sankibhanga, the Mundeswari, the Kana Dwarakeswar, the Sankra, the Jhumjhumi, the Amodar and the Tarajuli. There were no lakes in the district

There were no forests in the district but patches of scrub-jungle occured in thana Goghat, where plants, characteristic of dry uplands made their appearance. The vegetation on the whole was sparse, lacking both the large trees of the uplands and the luxuriant undergrowth of the lowlands. The Arambagh sub-division had the usual aquatic plants and marsh weeds common to alluvial lands. The tract between the Hooghly and the Damodar contained plants generally found in Lower Bengal, both cultivated and wild. First there were reeds, sages and aquatic plants in the marshes and swampy rice fields, next weeds, shrubs and smaller plants in the fields and commons, a little higher up, lastly surrounding the village itself, and belts of bamboos, cocoanuts, palms, mangoes, figs, jack and other trees. The river banks, where not occupied by houses, ghats or roads, were lined up with bamboos, figs, tamarisks and date-palm with thick undergrowth. Generally speaking the most noticeable botanical feature of the district was the luxuriant growth of plant life, natural to a soil of great natural fertility and abundant rainfall.

Among wild animals leopards are fairly common in the north of the district from Palagarh to Guptipara, and were also found elsewhere. Stavorinus, writing about 1769-70, said that, tigers were very numerous in the woods, and often sallied out into the inhabited places; there were likewise a vast number of wild buffaloes in the woods. (Reference according to Indian Gazette, four tigers were killed in Chinsurah in 1784). Both tigers and wild buffaloes had long disappeared, the last occasion on which a tiger was reported to have been seen being in 1830 among the ruins of Satgaon. Monkeys abounded all over the district. Wild hogs were common in some parts, and did a good deal of damage to crops in the Hooghly sub-division. Jackals were numerous, and other common mammals were the musk-rat, common rat-mouse, small grey-stripped squirrel, civet cat and mongoose. Hares occured in some parts, especially Dhaniakhali. Deer had been exterminated by the twentieth century. Both the ordinary small bat and flying fox were frequent. The Gangetic porpoise (Shusuk) was common in the Hooghly.

In the cold weather snipe, many kinds of teal and duck and other water-fowl abounded in the numerous jhils and swamps. Waders of many kinds were common, besides paddy-birds, sand-pipers, egrets, green shanks etc. several kinds of hawks and kites could be seen. Vultures were common. Birds of fine plumage were fairly frequent eg., jays, kingfishers, and several varieties of wood-peckers, fly-catchers etc.

Both kinds of crocodiles were found in the river Hooghly, viz., the gharial or long nosed crocodile, and the snub-nosed crocodile, known as Kumbhir; but neither was common. The iguana or guisamp, were found, as were smaller lizards. A small harmless grass snake and the dhamin were common; while the cobra and the karait was frequently seen. Insect, of all kinds, butterflies, moths, bees, ants, beetles etc. abounded. Locusts existed.

Many kinds of fish were caught in the rivers, marshes, fields and tanks. Sharks were not uncommon in the Hooghly. The estuarine fish were bhetki, hilsa, parse, khayra and phasa, mango fish or tapsi, etc. fresh water fish were members of the Indian carp family, such as rui, katla, mirgel, kalbans and bala. Others species caught and sold were chital, saralpunti, kholse, pabda and tengra. Several fresh water fish thrived in muddy stagnant water eg. magur, koi, singi, sol and lata. The rivers abounded in crustacean, especially shrimps, prawns and crabs, which were largely consumed. [18]

BURDWAN

The district of Burdwan laid mainly between the Ajay, the Bhagirathi or Hooghly, and the Damodar rivers. The district fell naturally into 2 main divisions. The eastern portion comprising the Burdwan, Kalna and Katwa sub-division, was an alluvial plain enclosed by the Ajay, the Bhagirathi and the Damodar on the north, east and the south and bounded by the Asansol sub-division on the west. To the west the district narrowed to a mere strip of rocky, undulating land, lying between the Ajay and the Damodar rivers, elsewhere the country was densely cultivated. Large trees were scarce, but the clumps of bamboos, the mango groves and the date and other palms which encircled the houses had a quiet beauty of their own.

The great drainage was from west to south-west to east. The western portion of the district resembled a promontory jutting out from the hill ranges of Central India and consisted of barren, rocky and rolling country with a laterite soil rising into rocky hillocks on the right bank of the Ajay river and shut in the west, north and south by the hills of Chota Nagpur and the Santal Parganas. The actual headland of this peninsula was formed by the pargana of Gopbhum formerly by tradition the seat of a Sadgop dynasty. This tract was practically treeless though a portion was still covered with sal forests and before the discoveries of coal in the nineteenth century the area was a tremendous wilderness dotted at long intervals by tiny clearings and settlements and intersected by no great road or route. The surface was generally covered with clay, in some parts alluvial, but in others formed from the decomposition of rocks, though in places the rocks are exposed and great stretches of land were wholly unfit for cultivation.

The Bhagirathi, which in its lower reaches below the town of Nadia and after its junction with the Jalangi, was known as the Hooghly, ultimately received all the drainage of the district as i.e. the Bhagirathi or Hooghly received drainage from the Kunur, Banka, Khari, Ajay, Nunia, Singaran and Dhalkisor and Damodar. There were no lakes in the district, but in the eastern portion, more particularly in the Katwa and Kalna subdivisions, small jhils or swamps in which water remained throughout the year abounded. The more extensive of these marshes lay on the right bank of the Bhagirathi. In some of the smaller rivers a thick variety of the reed called sar grew wild which was largely used in roofing houses. By the 1910s there were no forests in the district, but a large tract of about 100 sq. miles in the Ausgram police station and the western uplands of the Asansol sub-

division were covered with young sal. Perhaps the most interesting feature in its flora was the fact that here was found growing side by side a few species characteristic of the Punjab and Rajputana that had managed to find their way through Bundelkand and Behar and a far equally characteristic of the Coromandel and the Circars that had succeeded in spreading through the lowlands of Orissa and Midnapore thus far to the north. One of the most interesting members of the latter category was, perhaps, the intrinsically insignificant monotypic genus Sphaeromorphaea.The eastern portion of the district formed part of the great Gangetic delta and here, in land under rice cultivation, were found the usual marsh weeds of the Gangetic plain and many sedges. The villages and towns were surmounted by the usual shrubberies of semi-spontaneous and sub-economic shrubs and small trees which often covered a considerable area. Species of fig, notably the pipal and banyan with the red-cotton tree, mango and jiyal made up the arbour scent parts of these thickets in which Phoenix dactylifera and Borassus flabelliffer were often present, waste places were covered with climbing creepers and various milk weeds and also harboured quantities of Jatropha gossypifolia, Urena, Heliotropium, Sida and similar plants. The district contained no forest but the laterite country and the uplands of the Asansol sub-division were in places clothed with coppices of sal.

The carnivore of the district comprised leopard, wolf, hyaena, jackal and other smaller species. Leopards were not common but are occasionally found in the villages near the Dainhat in the Katwa subdivision. They destroyed cattle and goats and had been known to attack men. A leopard was killed close to the town of Burdwan in 1910, and in 1909 a good deal of damage was done in Kalna town by a leopard. Tigers were formerly common in the district, especially in the jungles of the Asansol subdivision adjoining the Santal Parganas, but by 1910s had entirely disappeared. Wolves were scarce and are mostly met with in the jungles north of Kaksa; they were known to carry off children. Hyaenas occasionally carried off goat and sheep. Wild pigs were numerous throughout the district and did considerable damage to the crops; monkeys also abounded. Poisonous snakes were also common and included several kinds of cobra, the karait and the deadly Russel's viper. Snipe were very numerous in the rice fields during the months of September, October and November and afforded excellent sport, while among other game birds were grey and black partridges, pea-fowl and jungle-fowl which were plentiful in the sal jungles of the Asansol subdivision. On the Damodar and in the marshes and jhils east of the Hooghly, goose, duck, and teal were found in fair numbers and green pigeon were also occasionally to be found. Other common birds were those usually met with in Bengal.

A considerable portion of the supply of fish was derived from the numerous tanks in the eastern portion of the district. The most common fish being the rui, katla and mirgel which were found everywhere in the rivers and tanks and the magur which were found in the tanks only, but there were a great number of other varieties of fish. Hilsa was also taken in the Damodar.[19]

NORTHERN BENGAL

This region was made up of the district of Darjeeling, crowned by the magnificent Himalayas and the districts of Jalpaiguri and Dinajpur, and Rangpur.

DARJEELING

The district of Darjeeling shaped like an irregular triangle was a region complete in itself. It consisted of a portion of the outlying hills of the lower Himalayas and a stretch of territory lying along the base of the hills known as the Terai. The range of altitude too was considerable. The Terai was only 300 feet above sea-level but there were parts of the district in the hills which were nearly 12,000 feet high.

The rivers of the district drained ultimately to the south. Dominating all the other rivers in the district was the Tista with the Great Rangit being the most important of its tributaries. The Jaldhaka carried the largest volume of water of all this group of eastern foothill rivers. Those nearest the Tista, the Lish, the Gish and the Chel emerged from the hills carrying great volumes of stones, mud and sand torn from their catchment areas by erosion and landslides. The rivers to the west of the Tista, the Mahanadi, the Balasan and the Mechi all flowed into the Ganges. The Mahanadi had its source near the mountain of Mahaldiram to the east of Kurseong. The Balasan rose near Lepchajagat on the Ghum-Simana ridge and its valley west of Kurseong was larger than that of the Mahanadi although it did not receive so heavy a rainfall. On the extreme west the Mechi river, formed a part of the district boundary with Nepal, whose chief tributary came from beyond the frontier.

The richness and variety of the vegetation of this district were the result of a number of physiographic, climatic, edaphic and biotic factors. The configuration of the mountains and hills of the district impacted upon the strong moisture-laden monsoon winds from the south greatly influencing the character of the vegetation from place to place. The other spurs had a heavy rainfall and were densely clad with moist forest of tropical and sub-temperate genera. But the valleys and gorges further inside the district had a lower rainfall and tended to bear a drier type of forest. The higher ridges of the interior, however, intercepted the moisture of the upper layers of the atmosphere which have passed over the outer spurs and thus developed an exceptionally most temperate climate in which moss-clad, lichen-draped trees and moist temperate flora thrive.

It was estimated that the plant communities in the district consisted of about 4,000 species of flowering plants under 160 families. There were also 300 ferns, of these about eight species were Tree Ferns. The most common species met with between 2,000 and 5,000 feet was Cyathea Spinulosa. In addition there were many other non-flowering plants – Liverworts, Mosses, Algæ, Fungi and Lichens. Abundant green and blue green algæ were met with in lakes, water courses, pools and swampy places. A beautiful

epiphytic brick-red alga that covered walls, rocks and tree trunks everywhere was the subaerial Alga-Trentepholia aurea. Taking altitude as the prominent factor in determining range of distribution of the various species, the different associations of plants may be grouped under main zones – the Plains, the Tropical or Lower Hill Zone, the Sub-tropical or Middle Hill Zone, the Temperate or Upper Hill Zone and the Alpine Zone.

In the Plains (Terai), communities of tall grass Saccharum arundinaceum and developmental association of Dalbergia sissoo and Acacia catechunoides sometimes mixed with Albizzia odoratissima and Albizzia procera cover open river-banks and adjoining open areas. There were also open grass-land and savannah areas covered with tall elephant grass-Saccharum elephantinum, Cymbopogon nardus, Arundo donax, Neyraudia reynaudiana, Saccharum spontaneum, Saccharum procerum, Narenga porphyrocoma, Thysanolaena maxima, Desmostachya bipinnata and others. In swampy areas, groups of Phragmites karka were met with. The tree association of this belt was mainly of sal, Lagerstroemia parviflora, Mallotus phillipensis, Terminalia species, Erythrina species, Garuga pinnata, Albizzia species and may be termed the Shorea-Lagerstroemia-Stereospermum-Terminalia-Garuga-Albizzia-Erythrina association.

The Lower Hill Zone formed a definite belt of vegetation from the plains up to 3,000 feet and upwards in a rather rapid ascent. This belt of about 1,500 feet and more was very unhealthy and was clothed in fairly dense forest, mainly Malayan in character and composed of trees commonly met with in the hotter parts of India. There were about 850 species of trees and shrubs in this belt and among these many are timber trees. The dominant species were sal and others belonged to the families of Orchidaceae, Leguminosae, Gramineae, Urticeceae, Euphorbiceae, Cyperaceae, Rubiaceae, Compositae, Asclepiadaceae and Acanthaceae.

The Subtropical or Middle Hill Zone extended from 3,000 to 6,000 feet. The European character of this Middle Hill Forest was sometimes very remarkable ; in one small forest near Kalimpong the following trees were found, though of course the species were different :- Oak, chestnut, cherry, maple, birch, alder, all of them fine large trees. A noticeable feature in many of these forests was the prevalence of tree ferns, Alsophilas, with tall graceful stems and feathery foliage making them at once the most conspicuous and the most beautiful of forest plants; the dense thickets of hill cane Plectocomia himalayica, especially found wherever the rocks were too steep for big trees and the multitude of large-leaved Aralias.

In the Temperate or Upper Hill Zone and the Alpine Zone changes in the composition of plant communities were observed in the succession of vegetation from 6,000 to 12,000 feet. The two zones were roughly divisible into a lower non-coniferous and an upper coniferous and Rhododendron belt; but the line of demarcation between these varied so greatly with the exposure and humidity of the locality that they could not be dealt with apart. Of the above families, the most conspicuous trees were Magnoliaceae (five species), of which one, Magnolia campbellii, before the destruction of the forest,

clothed the slopes around Darjeeling starring them in spring, when still leafless, with magnificent pink and white flowers. Other conspicuous trees of these zones were Oaks, Laurels, Maples, Birches, Alders, Bucklandias, Pyrus and Conifers. Of these, the Conifers were chiefly confined to the Alpine Zone from 9,000 to 12,000 feet in elevation. The monarch and the most common of them was Webb's Himalayan, which was also the most gregarious; others were the English Yew, the Sikkim Spruce, a Larch, the weeping Tsuga brunoniana and two species of Juniper, both of which, in dwarf forms, ascended high beyond the Alpine Zone. The absence of any true Pine or Cypress in the forest of this region of the region of the Himalaya was notable, in contrast with similar elevations in the Western Himalaya. Of shurbs the most conspicuous were the Rhododendrons (25 species), which abounded between 9,000 aand 12,000 feet elevations, some of them forming impenetrable thickets; a few of these were arboreous, though never attaining any great height. Only two Palms inhabited this zone, a scandent rattan and a very rare Fan-palm. Dwarf bamboos, of which there were six species, abounded, some of them forming impenetrable thickets infested with leeches and large ticks. Ferns were also characteristic of this zone. The bamboo Arundinaria species formed in some open spaces and witnessed dense growths between 8,000 and 10,000 feet particularly after a forest fire.

There was a higher Alpine Zone in Sikkim which descended to about 12,000 feet from the upper limit of the existence of flowering plants and could be usefully mentioned in connection with the vegetation of the Darjeeling District. The few trees to be found only on the lower skirts of this zone were scattered Birches and Pyri. The principal bushes were Rhododendrons (of which several species reach 14,000 feet elevation and three dwarf ones 16,000 feet), two junipers and species of Ephedra, Berberis, Lonicera, Caragana, Rosa, Cotoneaster, Spiraea and dwarf Willows or ferns there were very few. About 30 species reached 18,000 feet elevation, some of them a little higher. The highest recorded plant was a Festuca species at about 18,300 feet. In drier valleys about 15,000 feet elevation, several species of Arenaria occurred ; these formed hard, hemispheric or globose white balls and were a characteristic feature in the desolate landscape.

The diversity of the plant species in the Darjeeling hills bewildered the English, even with forest clearance made imperative by the spread of cultivation, the great variety of the floral wealth of the area was evident even as late as the early years of the twentieth century.

Due to the diversity of elevation, climate and vegetation the fauna of this district was also varied and interesting. The mammals consisted of between 80 and 90 species, there were two monkeys, the common Rhesus and the Nepal Macaque; the latter was often seen on Birch Hill in Darjeeling. Cats were well represented. The Indian Tiger was common in the plains and had been known to ascend as high as 10,000 feet in the hills. Leopards were likewise common and were also to be found at high elevations. Among the rarer cats were the Nepal Clouded Leopard, the East Himalayan Marbled Cat and the Golden Cat. Other cats being the pretty Horsfield's Leopard-Cat, the Fishing Cat and the

Himalayan Jungle-Cat: the last was the commonest of these. There were five civets: the Tiger-Civet and the Naga Hills Palm-Civet occurred above 2,000 feet : the others, the Large Indian civet, the Bhutan Duars Little Civet and the Northern Palm Civet were found in the hills and the plains. The Crab-eating Mongoose, the largest of three mongooses, was also found both in the hills and plains. There were three species of Canidæ, the Himalayan Jackal, the Hill Fox and the Nepal Wild Dog: the last was seldom met with. Two types of Bears occurred: the Indian Sloth Bear and the Himalayan Black Bear. The former lived in the plains and foot-hills; the latter was common up to 7,500 feet and occasionally came down to plains level.

The Northern Indian Yellow-bellied Marten was detested by all who preserved game. Squirrels, rats, mice and bats were far too numerous, two squirrels deserved mention, the Himalayan Flying-Squirrel found in the hills and the Assam Giant Squirrel found both in the plains and the hills. The Gaur, usually called "Bison", was found in the forests of the foothills and the Terai. Two species of the goat tribe were found in the hills, Jamrach's Serow and the Brown Himalayan Goral, at elevations between 2,000 and 9,000 feet. There were four or five species of deer: the two commonest being the Bengal Barking-Deer and the Sambhur. The former was found all over the distrct and its barking call was frequently heard: the latter was the largest of the deer species inhabiting the plains and hills up to 3,000 feet. The Chital, the most beautiful of them was not common and found in glades and forest near streams. There was one pig in the district, the Indian Wild Boar found in the plains and ascending the hills as high as 8,000 feet. The Indian Elephant had become rather rare in the district. It had been reputed to ascend as high as the Rishi La (10,300 feet). It was usually found in herds but old males lived alone and were apt to be vicious.

From the dense forests of the Terai, through the valleys of the Tista, Rangit and Balasan rivers to the high forests of the Singalila ridge there could formerly be found elephant, tiger, sambhur, large herds of spotted deer and pig, leopard, bear, goral and serow. Of the rarer animals, especially mention must be made of the Clouded Leopard, with its beautiful tortoiseshell markings, very seldom seen but commoner than was usually supposed; and of the Bay of Golden Cat about which very little is known. The rarest and undoubtedly the most curious animal was the Pangolin which was about 2½ feet long and had thick scales like an armadillo. Among the smaller mammals, the Himalayan wild cat, leopard cat, large Indian civet, palm-civet, pine-marten and porcupine were still found in large numbers all over the district in the early twentieth century but did great damage to game and poultry.

The mentionable birds of the district were Laughing-Thrushes, Blabbers, Chats, Thrushes, Warblers, Flycatchers, Finches, Minivets, Fairy Bluebird, Orioles, Sunbirds and the Long-tailed Broadbill, Indian House-Sparrow, Malay Tree-Sparrow, Woodpeckers, Cuckoos, owls, Tickell's Golden-backed Woodpecker, Indian Rufous Piculet etc. There were five species of hornbills found in the district including the Indian

Great Hornbill. Eight species of kingfisher, some of the most beautiful birds of the order, were found in the district especially noteworthy being the tiny Indian Three-toed Kingfisher. Fifteen owls were found, but one belonged to a separate family. Accipitrine birds were the Hodgson's Feather-toed Hawk-Eagle, the Himalayan Rufous-bellied Hawk-Eagle, the handsome and bold miniature Falcon, the Himalayan Red-legged Falconet, TibetanRuby-Throat, Green-Pegion, Hodgson's Imperial Pegion, Wood-Pegion, Speckled Wood-Pigeon etc. The game-birds were of eight species. The Indian Red Jungle-Fowl, Black-backed Kalij Pheasant, The Monal, the Crimson Horned-Pheasant or Tragopan, the Blood Pheasant, the Assam Common Hill-Partridge, Blyth's Rufous-throated Hill-Partridge,the Common Grey Quail, the Burmese Bustard-Quail, the Indian Large Button-Quail etc. The Woodcock was found in the hills. Wood-Snipe, the Solitary Snipe, the Fantail Snipe and the Pintail Snipe, Eastern Golden Plover, the Ibis-Bill, the Great White-bellied Heron etc.

Fifty-one species of snakes were found in the district: of these eleven were more or less poisonous, namely four Karaits, two Cobras, one Coral-snake and four Vipers. The largest was the King Cobra, or Hamadryad. There were the Lesser Black Karait and the commonest of the Karaits found here. Green Pit Vipers occured and the repulsive looking Large Spotted Viper were common. The fish varieties included the Mahseer, Katli, Indian Trout and Goonch. The premier place among Indian game fishes was deservedly occupied by the Mahseer. [20]

JALPAIGURI

The name Jalpaiguri is derived from jalpai, an olive tree, and guri, a place; it means, therefore, the place of the olive trees, of which once there used at to be many in town .

Sir W.W. Hunter, in his Statistical Account of Jalpaiguri, gives the following description of the Western Duars :- "The Bhutan Duars, the tract which was annexed at the close of the war of 1864-65, is a flat, level strip of country, averaging about 22 miles in width, running along the foot of the Bhutan hills; its chief characteristics are the numerous rivers and hill streams which intersect it in every direction, and the large tracts of sal forest and heavy grass and reed jungle, interspersed with wild cardamoms. These grass and reed tracts are especially dense and luxuriant along the banks of the rivers and streams, where they grow many feet in height; in some places they are impenetrable by man. Here the beautiful cotton tree is to be found growing in great luxuriance and with surprising vigour and rapidity, resisting even the action of the fires by which the jungles and under-growth are yearly consumed at the commencement of every cultivating season. With this single exception, these vast tracts of grassy jungle are almost treeless, and bring out into greater relief the village sites, situated few and far between. These little hamlets are remarkable for the most luxuriant vegetation. Large clumps of bamboos and groves of plantain trees hem them in on all sides, almost hiding the houses from view. Above them

are seen the tall, graceful betel-nut palms, and here and there a few other large trees, such as mango, jack, and pipal; and round about the dwellings, in fact up to the very doorways, are shrubs and creeping-plants of endless form and variety. Fine fields of rice and mustard are also found in the vicinity of the villages. The scenery in the north of the Duars, along the foot of the mountains, where the large rivers debouch upon the plains, is very grand and beautiful, especially at the point where the Sankos river leaves the hills. In the neighbourhood of the Bhutan range, for from five to ten miles before reaching the hills, the land rises gradually. In this tract the soil is only from three to four feet deep, with a substratum of gravel and shingle; and in the dry season the beds of the streams for some miles after leaving the hills are dry, the water re-appearing farther down. Owing to the difficulty of procuring water, there are no villages in the vicinity."

The only hills in the district were the Sinchula Hills to the east of the Torsa, which rose abruptly to a height of from 4,000 to 6,000 feet, and formed the boundary between British and Bhutan territory. The rivers and streams of the Jalpaiguri district were very numerous, particularly in the Western Duars. The principal rivers in the district from west to east were the Mahanadi or Mahananda, Karatoya, Tista, Jaldhaka, Duduya, Mujnai, Torsa, Kaljani, Raidhak, and Sankos.

The trees of importance in the district were sal, sissu, khair, kainjal, malagiri, simul etc. Sal is found scattered here and there, and in the vicinity of river-beds the forest gradually turns into khair and sissu found. The Jalpaiguri district had always been famous for its big game although the heavy grass and reed jungle which was the favourite resort of wild animals was steadily diminishing owing to the extension of cultivation. Among the larger carnivora were the tiger, the leopard and the clouded leopard. The tiger was found all over the Western Duars, in the neighbourhood of the forests; the most famous shooting-ground was on the east bank of the Jaldhaka river opposite Ramshai Hat where Lord Curzon shot several tigers in 1904. Tigers were also occasionally seen west of the Tista and one was shot in 1907 in a small patch of scrub jungle about four miles from Jalpaiguri, not far from the southern extremity of the Baikanthapur forest. The largest tiger, which has been shot in the Western Duars, measured 10.2 feet. Leopards were common all over the district. The clouded leopard was very rare and was found only in the Buxa hills. A black leopard was shot about five miles from Jalpaiguri in 1906 by the Superintendent of Police. The leopard cat and the jungle cat were common, as are also the larger civet cat and the smaller civet cat. There were jackals and the wild dogs but wild dogs were seldom met with. The only representative of the genus Vulpis was the Indian fox. There were elephants and the wild pigs and also the rhinoceros, bison, wild buffalo, and many kinds of deer. The wild pig was commonly found throughout the district. All three varieties of the rhinocerous: the Rhinoceros indicus, Rhinoceros sondaicus and Rhinoceros Malayan were all found in the district. Of the deer tribe, the sambhar was often seen in the forest, hog deer, swamp deer and barking deer were still common in the district. The bear family was represented by the Himalayan black bear

and the common Indian sloth-bear. Other mammalia found in the district were the common Indian hare, the hispid hare which were very rare, monkeys, squirrels, others, porcupines and several of the smaller rodents.

Game birds used to abound in the Western Duars but many species were getting scarce as the grass lands were being brought under cultivation. The Indian pea-fowl was still common particularly in the jungles east of the Jaldhaka and the Torsa rivers; the Indian bustard and the floriken were becoming scarcer, but were still fairly numerous in the cold weather in grass jungle on high land ; the lesser floriken or likh was also met with. The Khalij pheasant was common in the forest north of the Meenglas tea-garden and the Moonal pheasant found occasionally in the Sinchula hills near Buxa. Partridge were common everywhere, but many of the best shooting grounds had been brought under cultivation in recent years and there were nothing like so many as there used to be. The black partridge, the swamp partridge and the grey partridge were still fairly common and the hill partridge was found in the hills near Buxa. The red jungle fowl could be seen feeding in the early morning and at sunset on the edges of the forests. The green pigeon was common all over the district and the Imperial pigeon was found in the forests. Snipe, duck and quail were also fairly numerous.

Many varieties of snake were found in the district. The hamadryad or king cobra and the python were numerous in the forests of the Western Duars, where large specimens were occasionally shot. The common cobra, the karait, the banded karait, Russel's viper, the phursa, and one of the pit vipers were met with throughout the district. The common grass snake and several species of water snakes are also very common.

The numerous rivers and streams in the district contained many varieties of fish of which the mahseer, rohu and katli were the biggest. Other large species were the chital, boal, kalbaus, karusa, and raicheng. Mahseer fishing used to be particularly good in the higher reaches of the Jaldhaka, Torsa, Raidhak and Sankos rivers and big fish were still caught occasionally. [21]

DINAJPUR

The district of Dinajpur lay in the Rajshahi Commissionership of the province of Eastern Bengal and Assam. The general appearance of the country was flat, sloping gently southwards.. In the south and portions of the west of the district the curious formation known as the Barind, geologically classed as old alluvium, made its appearance. The characteristic of this was an undulating country interspersed with ravines. The ravines varied from shallow stretches of low land, suitable for growing rice, to deeper depressions bearing a resemblance to old river-beds and sometimes contained water. These latter were locally called Kharis. The ridges were commonly covered with scrub jungle and stunted trees. The prevailing toddy and date-palms gave a peculiarly oriental character to the scenery, even though what was quintessentially 'oriental' in the English perception was increasingly getting blurred by the 'experienced' reality.

The general direction of the main rivers was without exception from north to south, and the ultimate destination of all was the Ganges. Dinajpur, had one or two patches of tree jungle on the banks of the Tangan river in the north of the district. These patches were the survivals of a once extensive tract of forest which is said to have extended from a point some distance south of Thakurgaon right through the Jalpaiguri district to the Himalayas. The characteristic of this tree jungle was the presence of large forest trees interspersed with short thorny varieties and scrub, which rendered it dense and impenetrable. The Prannagar jungle in the Birganj thana was at one time a fairly thick forest, notorious as the haunt of dacoits and tigers. Coppices of sal were fairly common throughout the district. Common as it was, the sal tree in the district was stunted, gnarled, and of small girth, and compared very unfavourably with the fine sal trees of the Assam forest. Trees of all sizes and varieties, amongst which the most conspicuous were the banyan, the peepal, the pakar, the simul or cotton tree, the nim, the tamarind, the mango ,the jack, the babul, the Indian plum or ber, the champak, and the hijal. In parts of the district, especially in the neighbourhood of some of the large bils, stretches of grass jungle were found. Here were to be found many species of grasses and reeds, such as the ikra, the nagormutha, a species of tall grass with a triangular blade of stem, used for making sleeping mats and elephants gadis; the khaskhas, a plant with an odorous root, used in many parts of India for making screens was found. Tamarix and Rosa involucrata were also common, the latter bearing a great resemblance to the English wild-rose. The nal, a species of tall reed with a feathery top, and the sola were also found. An account of the flora of Dinajpur would be incomplete without some description of the bamboo, so common in the district and utilised for so many purposes. Of these the bara bans was the largest and most valuable bamboo. Two species of cane, a thick and a thin variety, were found in the district in woods, and in thickets near villages where the soil was sufficiently rich and moist.

Major Sherwill in his Revenue Survey Report, concluded in 1863, spoke of tiger, buffalo, barah singha or swamp deer, hog-deer and badger as common. The Prannagar jungle in the Birganj thana was so notorious for tigers that no traveller would pass through it at night, or even in the daytime, if alone till the last decades of the nineteenth century. An occasional hog-deer was sometimes, though rarely, met with in the same locality in the beginning of the twentieth century. Leopards were still common in most parts of the district. Various kinds of wild cats, such as the ordinary wild cat (resembling the common Indian domestic cat but larger and fiercer), the tiger cat, the civet cat and the fishing cat (Felis niverrina) were commonly found even in the first decades of the twentieth century. The last named, locally called mach biral, a large sized spotted animal with a short tail, was found in marsh-land and thickets bordering rivers, swamps and old tanks, and fed principally on fish and wild fowl. Jackal, fox and mongoose were common. Hyæna were nowhere mentioned as indigenous to the district, but in May 1909 an unmistakable hyæna was seen in the Bansihari thana. Hares were found in the grasslands

but were not numerous. The shorter tailed Bengal monkey (Macacus rhesus) was very occasionally seen.

The birds of the district included vultures of different kinds and kites-amongst which the Brahmani kite (Haliastur indus) were found. Others were eagles, hawks, swallows and martins, moinas and king-crows. Owls were of many varieties, amongst which the small screech-owl was the prettiest and most common. Amongst birds of the cuckoo family the brain-fever bird (Hierococcyx varius), the coucal or crow pheasant (Centropus sinensis) were found. Small birds of handsome plumage or otherwise attractive appearance were the hoopoe, the golden oriole, the blue jay (Coriacus indica), the bee-eaters with their long, slender bills, and green plumage and the kingfishers large and small. The night jar or goat-sucker (Caprimulgus) was found everywhere. Of the columbæ, the green pigeon, the common wood pigeon, and various kinds of dove were fairly plentiful. An extremely beautiful and rather uncommon species of dove was a wood dove with beautiful dark green, crimson and copper plumage, and one of the prettiest birds, was found in the district. Among water birds may be mentioned the common coot (Fulia atra), the purple moor-hen (Porphyrio poliocephalus), the common moor-hen, the dabchick, several kinds of herons and cranes, and two species of cormorant, and a small black species and the other a larger bird with black body and wings and yellowish head and neck. Sand pipers or snippets of various kinds and the Indian river tern were common to every stream and bil. Birds of the plover family found in the district were the grey plover, the little ringed plover, and the red-wattled plover (Sareogrammus). Snipe i.e., fantail, pintail, jack and painted snipe were sometimes met with on the edges of some of the larger bils. The land game birds of the district were the black partridge or titur, the kyah or swamp partridge, the grey quail and the button quail. The latter were to be found anywhere in grass jungle, but are never plentiful. Partridges of both kinds were fairly plentiful in the low grass country on the lower reaches of the Punarbhaba river, but elsewhere were rare. The commonest wild fowl were the gadwall, the pochard, the common teal, the large and small whistling teal, and the cotton teal. The ruddy sheldrake or Brahmani duck was met with sometimes.

Snakes are fairly common, and the poisonous varieties caused some loss of life, especially during the rains. The numbe of species is not large, the principal being the cobra, the dhaman and the rat snake, the common karait, the various grass-snakes, and some water snakes. The hamadryas or king cobra, the banded krait and the python or boa constrictor were occasionally found. This is a large lizard, with some outward resemblance to a crocodile. Two kinds of crocodiles, the magar called locally kumir or bocha, a blunt-nosed species, and the gharial or long-snouted, fish-eating crocodile, were found in some of the rivers, especially the Nagar, the Punarbhaba and the Mahananda, and in some bils and old tanks.

Dinajpur was at one time famous for its fish and was known in the Mahabharata as Matsya desha, or the fish country. The most common fish in the district was probably

the carp, of which the best known species were the rohu and the katla. There were also found the following: the boal, a fresh water shark, the pafta, the shol, the gajal, gorai and cheng ; the kai or the climbing perch, which is ditinguished by its ability to get from one piece of water to another (incidentally there is a legend that it has been known to climb trees) ; the khoska; the bheda; the bain, an eel-shaped fish found in tanks, muddy rivers and sluggish streams ; the tepa. Among crustacea were prawns of several kinds, locally called 'chingri', and kankra or crabs of the fresh water variety, which were eaten by the poorer classes. [22]

RANGPUR

The district of Rangpur lay in the Rajshahi division of the Province of Eastern Bengal and Assam. Rangpur was a vast alluvial plain unrelieved by natural elevations of any kind. In the north were high sandy plains of large extent, and along the west was a strip of high land, composed of stiff red clay; the rest of the district, especially towards the east, was of low level with alternate sandy and earthy soil and nearly more than a third of the total area was inundated during the rains. The general inclination of the surface was from north-west to south-east, as indicated by the flow of the great rivers, the Brahmaputra, Tista, Karatoya and Dharla. Besides these great water-courses, the whole district was traversed by a network of smaller streams and channels connected with one another or with the main rivers.

The topography of the district was dominated by its rivers. The Brahmaputra and the Tista exercised an enormous influence by the fertilizing effects of their inundations and also by their diluvia ting action. All the rivers of Rangpur and many water-courses were navigable by boats of two tons' burden in the rainy season. The Brahmaputra and Tista were nowhere fordable during the rains. The Gaghat flowed through the centre of the district. It was formerly an important branch of the Tista. The Manas was a branch of the Tista in Sadr sub-division 0and ran parallel to it for about 25 miles before it rejoined the parent stream. The Mura Manas was another branch of the Tista, in Gaibanda sub-division. The Gujaria was a considerable channel which separated itself from the Tista shortly before the river joined the Brahmaputra.

The district contained many swamps and marshes, called jhils, or bhils, whose origin could be traced to the numerous changes which had taken place in the channels of the larger rivers, particularly the Tista. They were gradually becoming shallower and were diminishing both in size and number. The largest, known as the Bara Bhil or great swamp, covered about three square miles. The Lunipukur Bhil, the Tongai Bhil, the Kukrul and the Chikli Bhils were others. It was one large alluvial tract consisting of sand and clay brought down by the great Himalayan rivers, especially the Brahmaputra, Tista and Karatoya.

From the botanist's point of view, the district was included in the division known as Indica diluva, whose characteristics were as follows :- South of the sub-montane

forests and swamps, and further out into the plain, the ground as a rule rose somewhat, and was free from inundations the waste tracts here were usually covered with open jungle – of a bushy character in the western parts, taller and more park-like in the central districts, and mixed with reedy grass and, sometimes, consisting only of tall grass as one moved to the east. Much of this tract especially in the west, was under cultivation and sometimes bare, or diversified with bamboos, palms and orchards of mangoes or, less often, groves of other trees. In and about the villages themselves the mangoes are often accompanied by a number of tree-weeds and semi-spontaneous, more or less useful bushes and trees that formed characteristic village shrubberies.

The district possessed a great variety of trees. The shady banyan and the stately pipal attained a very great size. Jack trees were numerous and there were sisoo, which, in 1809, Buchanan found only on the borders of Nepal and Bhutan. Many varieties of palms were found in the district, the chief being the gua or the betel-nut palm, the narikel or cocoanut palm grown in the south, and the khejur or date-palm. The principal varieties of the bamboo were the bara bans, the talla bans which makes good fishing rods, the beru bans, a prickly plant fit only for fuel, and the makla bans. The canes of the district were of inferior quality. The reeds were of more importance and the bara khagra found in the chars of Nageshwari thana were often higher than the head of a man when riding on an elephant. The nal reed grew to the size of a bamboo. The only reed, however, that yielded revenue to the zamindar was the ulu or thatching grass. The bhils and marshes in the district were usually covered with a variety of aquatic vegetation.

Rangpur abounded in wild animals. Tigers had their haunts all over the district, elephants were trapped or nosed and wild buffaloes were hunted with spears and poisoned arrows. Wild pigs abounded on the chars of the Brahmaputra valley. Among large carnivora the leopard was common. Jackals hung about the villages in large numbers. The Indian fox, several species of the mongoose family and hares were found all over the district. Porpoises were numerous in the Brahmaputra. Bears and deer, which were once common, are no longer met with by the beginning of the twentieth century and monkeys and porcupines were rare. Squirrels, mice and rats represented the rodent tribe.

The district had a great variety of birds. The bhils and marshes were tenanted by a large aquatic population, including rails, coots, water-hens, storks, herons, cranes, cormorants, divers, dabchicks, waders, gulls, terns and paddy-birds. The kaim or purple coot once abounded but were seldom met with by the early twentieth century. Among the larger birds of the district the splendid white-tailed eagle was often seen perched on a dead tree ready to pounce on an unwary fish or eel. There are several varieties of vultures and owls, and kites, hawks, buzzards and shrikes took their toll of the smaller birds all over the district. The common and the carrion crow were seen everywhere.

Reptiles were abundant in the Rangpur district. The common cobra and the krait were the chief venomous varieties of snake and were the cause of frequent fatalities when the inundations compelled them to seek refuge in the higher lands. The most important of

the non-venomous was the python of which species the largest was the Chandra bora. Gharial, a purely fish-eater and the boncha which attacked men and cattle were found. Turtles and tortoises abounded in the rivers and there was a special lizard, seen everywhere, which included the common monitor (gui samp).

The usual varieties of fish found in the plains districts of the province were well represented. Several species of the carp were found; the most prized being the ruhit or rui, katla, mirgal, chanda, chela and puli. Among varieties with smooth and lubierous skins were the air, bagair (spotted air), pangash, baccha, rita (a diminutive air), and the tengra – all members of the Pimelodus species; and the boali, pabda and singi of the Silurus species. Among other well-known varieties were the ilisha or hilsa – occasionally caught in the Brahmaputra and Tista – the bain (eel), the kai greatly esteemed for its delicate flavour, the chital, sail, gazal, gharua, batashi, cheng, khalisha, magur, and the chingri or prawn.[23]

REGIONS OF LINGUISTIC BENGAL INCORPORATED IN EASTERN BENGAL AND ASSAM

The Dacca, Chittagong and Rajshahi Divisions, Malda, Hill Tippera, Sylhet and Comilla districts were made a part of the new province in 1905. Rajshahi and Malda geographically speaking belonged to Northern Bengal.

DACCA

Dacca could be categorized into two natural divisions very dissimilar from one another both in appearance and geological formation. From the centre of the base of the triangle, a wedge of elevated land was driven into the low alluvial flats which formed the greater portion of the district. This high land was known as the Madhupur jungle. The remainder of the district consisted of low land inundated to a greater or less depth during the rainy season but yielded and still yield fine crops of rice and jute.

The largest river, any portion of which fell within the boundary of the district, was the Padma which was formed by the confluence of the Brahmaputra, known here as the Jamuna and the Ganges. A river which was of great importance in the economy of the district was the Dhaleswari, Other important rivers were the Buri Ganga, the Ichhamati, the Ghazikhali and Bansi, the Turag etc. The Lakshiya, though not the largest, was by far the prettiest river in the district. The Meghna is the name applied to the lower reaches of the Brahmaputra river. Numerous chars were thrown up in the beds of the different rivers.

In the early years of the nineteenth century the Madhupur jungle was full of game of every kind, and was so infested with wild elephants that the villagers found it almost impossible to cultivate the land. Tigers also were numerous and deer and pig were found in considerable numbers. There were a few wild buffaloes in the country to the north-west of Sripur, a few tigers and a large number of leopards even in the early years of the

twentieth century. Deer of four species were found. The smaller animals included monkeys, porcupines, foxes, jackals, otters and hares.

Vultures, crows, several varieties of eagles, fish eagles, kites, and falcons were common. Several species of owls were found, and were regarded by the natives with superstitious dread. Swallows and kingfishers were numerous. Snipe were also to be seen. The fish eating alligator or gharial and the snub-nosed crocodile occasionally carried off the unwary bather. The principal poisonous snakes known to the natives were the Cobra, Machhanad, Panas, Goma, Darach, Dubraj and the harmless were the Ulubora, Jinglabora, Landog, Ghauni, Matishap, Dhora, Airalbeka, Shalikbora, Shankhini, Dhauma, and Domukha.

Porpoises were very common in the larger rivers and sharks, ray fish and saw fish were occasionally met with. The best eating fish found were the hilsa, the mango fish, the rui, the mullet, the paftar, the chital, the mirga, and the catla. Crabs, crayfish and prawns were also plentiful. [24]

FARIDPUR

The district of Faridpur, which lay to the west of the Dacca Division, resembled an irregular triangle with its apex to the north and its base to the south. The description of the district given by Sir William Hunter in his Statistical Account of Bengal (1875) characterizes the general aspect of the country as "flat, tame and uninteresting".

Faridpur was bounded on two sides by great rivers. The Padma or Ganges, which near Goalundo was joined by the Jamuna or Brahmaputra and in the south-east, it merged with the Meghna, as the estuary was called by which the water of the two greatest rivers of India discharged themselves into the sea. The creation of chars or diaras was an interesting example of soil formation and was found in this region. Other rivers were Garai and Madhumati, Arial Khan and Bhubaneswar, Chandna and Kumar.

Marsh plants and weeds were found in great variety and luxuriance; and in the bil area the surface of the marshes was covered either with huge stretches of inundated rice or with matted floating islets or sedges, grasses and various water-lillies. The chief species of palm were the date palm (Phænix acaulis) and the betel-nut. Clumps of bamboos were found everywhere, except in the bil area of Kotalipara thana.

Rennell's map shows a large part of what is now the district as "impenetrable morass," and from the records of early British rule it is clear that the east of the district contained extensive stretches of jungle, which were the habitat of tigers and buffaloes. As late as 1875 the Statistical Account of Bengal stated that wild buffaloes were common in the cold season. Leopards of the small variety usually found in Bengal lurked in the patches of jungle found in the north and west of the district and occasionally a tiger broke cover from the Sundarbans and took refuge in the southern marshes even in the beginning of the twentieth century. Wild pigs were numerous and devastated the crops, especially in the Faridpur and Bhushna thana areas.

The marshes abounded with wild fowl, geese, ducks of various sorts, snipe, curlew, teal etc. crocodiles, both of the man-eating and fish-eating varieties, were common in the large rivers. With its large water area the district was well stocked with fish. The only sea fish which visited the disrtrict was the bhekti. Another favourite fish among Europeans was that succulent member of the herring family, the hilsa, which teemed in the Padma. Some of the most popular fish were members of the carp family, viz., rui, kalbans, and katla. Another fish of the same family is the mirgal, which was found in the muddy bottoms of rivers and tanks and was of an inferior flavour. Another silurid found in the still water of marshes and tanks was the magur. A curiosity among fish was the climbing perch called kai. Among crustacean the galda chingri abounded in the rivers. The ordinary chingri or shrimp was also abundant.[25]

RAJSHAHI

Rajshahi lay in the south-west of the Rajshahi division. One of the principal features in the configuration of the district was an abundance of low-lying depressions, which frequently formed marshes or swamps (bils). Travelling from west to east, the whole boundary of the district was covered by a series of marshes. Their appearance, however, varied greatly, for while some were clear and deep sheets of water, others were shallow swamps filled with grass and reeds growing so thickly as to be almost intermitted. Others again, far from being unproductive wastes, were the most uniformly fertile rice lands. The bil of widest repute was the Chalan Bil, except on the north and west, the district presented the usual appearance of a recent old river beds and broken, here and there, bils. While this was the general aspect, three different divisions could be distinguished in the district.

The Barind was a tract of comparatively high land, which included portions of the Malda, Rajshahi, Dinajpur, Rangpur and Bogra districts in the Rajshahi Division. Large trees were there, the country was well wooded. In some parts palm trees were found in great numbers, either singly or in clumps, and furnished characteristic scenery. The whole country was drier than the alluvial flats. The soil was harder and less friable; it had not the same dull grey hue, but is in places yellowish to red.

The second region was a riparian tract along the Ganges, formed by the thanas of Rampur Boalia, Charghat and Lalpur and had a grey sandy soil, on which a variety of crops were grown. The district sloped slightly from west to east, and its drainage was carried off not by the rivers but through the marshes. With the exception of three rivers, viz., the Ganges, which formed the southern boundary of Rajshahi, the Mahananda, which ran for a short distance along its western border, and the Atrai, which traversed the district from north-west to south-east, the other rivers are of little hydrographic importance, and most were more or less moribund. The Padma appeared with all the attributes of grandeur and utility. In the words of Sir William Hunter “it rolls majestically down to the sea in a bountiful stream, which never becomes a merely destructive torrent

in the rains and never dwindles away in the hottest summer." It was generally, however, split up into channels flowing between sandbanks, islands and alluvial accretions generically known as chars or diaras.

In the 1880s, the chars were covered with thick jungle, of which the following description written by Mr. H. Torrens, I.C.S. in about 1850 is given in Simpson's Sport in Eastern Bengal :- "The jungles are long strips of thick reedy cover lying in hollows about water and scattered about an immense extent of alluvial plain-lands, the cleared portions of which grow indigo, which have formed at the confluence of the Ganges and Jellinghee rivers. It is called in the local dialect a dher (sic), and being covered with water in the rains, is in drier seasons not unhandsomely covered with pank or phassin as they call it up-country, that treacherous amalgam of bog, morass and quicksand which is none of them and yet beats them each and all in abomination. The open ground between these covers, across new indigo lands, afforded excellent riding; but there was no want of variety. Virgin jungles, self-sown on the new alluvial lands called chars, afforded to the curious in equitation every obstacle combined that could tempt a man, even with game afoot, to hold hard ; now miles of thick-set cane-like reeds, semi-impervious to appearance, rising above the head of a mounted man and covering an expanse where every eddy and counter current of the tumultuous waters that formed it had left its individual foss and hollow in the new indurate sand ; or else ragged scrubby brakes of ill-condition attempts at low trees which, being unable to stretch their heads as high as they like, stretch their meagre arms abroad, or else grass so thick that the boar before you is only tractable by the wake his rushing progress leaves of shaking stems ; this grass grows on lumpy uneven soil where the subterranean labours of Sir Rat have favoured its spreading roots. And yet again there is a variety which deserves notice in the above jungle, and that is when, growing in thick tufts, it has forced up tussocks or little hummocks of earth from a foot to 18 inches high..."[26] Not all the chars were like this, but covered more or less thickly with dry benna grass, with no cultivation or open ground, but with a hard soil full of ruts, stumps and cracks.

The district was covered with abundant natural vegetation. Old river-beds, ponds and marshes, and streams with a sluggish current had a copious vegetation of Vallisneria and other plants. Land subject to inundation had usually a covering of Tamarix and reedy grasses. Few trees were found on these inundated lands; the commonest was the hijal. Magnificient specimens of the banyan, pipal and red cotton tree (semul) were seen. The villages were generally burried in thickets of bamboo and tree growth. Palms were numerous in the Barind, and in the south of the district there are many khejur or date palm trees, besides numerous specimens of the babul or gum arabic tree with its sweet-scented yellow flower.

The District was formerly well stocked with game. Mr. Simpson was a member of the Indian Civil Services, whose first station (in 1850) was Rajshahi. The chars in those days were under jungle, with the exception of some clearings where indigo was sown: the

rest of the char land was covered with thick reeds, rushes and tamarisk bushes, and in some places the jungle was so heavy that it could only be beaten with the help of a line of elephants. The chars then sheltered wild buffaloes. The Barind was also a good hunting ground, in which tiger could be got. There were large tracts of tree jungle, with palms, bamboos and all the common Bengal trees: at the foot of these trees shrubby, thorny jungle afforded the best of cover for all game. Black partridges and hog-deer swarmed in the thatching grasses; khyah partridges, called 'Chickore,' abounded in the rose-bushes; snipe and nearly every kind of Bengal wild duck resorted to the water in the centre. The district contained buffalo, tiger, leopard, wild pig, spotted deer and hog-deer. The small game consisted of hares, pea-fowl, black partridge, kyah or swamp partridge, rain-quail, the likh or lesser florican, snipe, geese and wild fowl of all sorts. Last among the mammals may be mentioned the Gangetic porpoise (susuk), which is common both in the Ganges and Atrai and also in the deep water basin of the Chalan Bil.

During the cold weather both the Ganges and inland waters were visited by great flocks of wild fowl, duck, teal and snipe. Wild duck and teal were especially numerous on the Chalan Bil, the Dubalhati Bil 6 miles south of Naogaon, and the Halti Bil. The district abounded in a great of birds. Vultures are exceptionally numerous. The fishing eagle was conspicuous near bils and rivers. The most common representative of the cuckoo family was the crow-pheasant with black wings and copper-coloured body and the koil. Night-jar or goat-sucker was constantly heard, they had a resonant ringing note extraordinarily like the sound of a stone falling on ice.

Owing to its numerous rivers and the large water area covered by bils the district was well stocked with fish. The hilsa, are caught in large numbers in the Padma. Of other fish, the most popular was three of the carp family, viz., the rui or rahu, the kalbans and the katla. The mirgal is another carp of inferior flavour. Other common fish are silurids, such as the boal, magur, air, tengra and bachua. The magur was a fresh water fish which flourished in dirty stagnant water, as did the curious little climbing perch called the koi.

Rajshahi had an assortment of the usual snakes found in Northern Bengal. The commonest poisonous snakes were the cobra, the krait (Bungarus cæruleus) and the banded krait (Bungarus fasciatus). The Russel's Viper was also common, and the king cobra or hamadyrad (Naia bungarus) was occasionally found, this last cobra fed principally upon other snakes, and had the reputation of being excessively fierce and aggressive. Of non-poisonous snakes, the largest was the dhaman or rat snake (Zamenis mucosus). Other harmless snakes were the gharmauni, hele and jaldora, the last being perhaps the commonest water snake. Two kinds of crocodiles were found in the principal rivers and also in a few old tanks, viz., the blunt-nosed magar which was called locally the kumbhir or bocha, and the gharial, i.e., the long-snouted, fish-eating crocodile. [27]

BOGRA

The district of Bogra lay on the right bank of the Brahmaputra (here called the Daokoba), and consisted of a great plain, unbroken throughout its whole extent by a single natural rising ground or hill. There was a little jungle and a few trees, except on the sandy islands and accretions on the banks of the Daokoba, where a stunted species of jhau tree (Tamarix dioica) was found. The western portion of the district presented a marked contrast to the eastern. It was well-wooded, dense scrub jungle being found in parts, and was generally above flood level. The soil was locally known as khiar (sapless), and was hard, compact clay, and of reddish colour.

The rivers of Bogra, all formed a part of what was called the Atrai tributary system of the Brahmaputra and included the Katakhali, Bangali, Halhalia, Karatoya, Jamuna, Tulsiganga and Nagar. There were no lakes in the Bogra district, but marshes and bils were numerous.

Of the larger sorts of game, tigers which once abounded in this district had completely disappeared by the early twentieth century. Leopards were still common in the police division of Panchbibi and Sherpur, and were occasionally seen in almost every part of the district. Wild boars, once a pest in the Panchbibi police division, were getting scarce. Wild buffaloes and deer had disappeared altogether. Hares, porcupines and wild cats were occasionally seen. Jackals and foxes are met in almost every village. Bogra was notorious for its venomous snakes, the cobra and the krait being the most common kinds. Squirrels and monkeys which did so much damage to fruits elsewhere, were conspicuously absent in this district. Of the game birds, the indigenous quail (button quail), and the black partridge were found in the scrub and grass jungle of the Panchbibi thana. A few indigenous whistling and cotton teals were also found in the bils and lonely tanks of the district. Migratory ducks, chiefly the pochard, the gadwall, the pintail and teal, in small numbers, came to the larger bils, and to the chars of the Brahmaputra. Geese and Brahmani duck abounded in the chars of the Brahmaputra. Snipe were fairly numerous in some years. Ortolans were also common all through the cold weather.

Where the ground was not occupied by the usual crops of Northern Bengal, it was covered by abundant natural vegetation, except in the beds of the greater rivers which were swept during the rains by a strong current. Old river-beds, however, ponds and marshes, and streams with sluggish current, had a copious vegetation of Vallisneria and other plants. Land subject to inundation had usually a covering of Tamarisk and reedy grasses, and in some parts where the ground was more or less marshy Rosa involucrate was plentiful. In the Barind, gigantic pipal and even some sal trees were to be seene even as late as the early twentieth century. Dense scrub jungle still remained in places in the Sherpur and Panchbibi thanas. Among the trees the most conspicuous were the red cotton tree or simul and the jack tree; the sissu and mango occurred as planted or sometimes self-sown species.[28]

MALDA

The district of Malda formed the western portion of the Rajshahi Division of Bengal, the river Mahananda flowing north and south roughly divided the district into two equal parts, corresponding by local tradition to the old boundary line of the Rarh and Barendra. West of the Mahananda the country was again divided into two well defined parts by the Kalindri river flowing west and east from the Ganges. North of the Kalindri the distinguishing natural feature was the tāl land, the name applied to the land which floods deeply as the rivers rise, and drains by meandering streams or into the Kalindri. The most striking natural feature was the continuous line of islands and accretions formed in the bed of the Ganges by its ever changing currents and known as the diara.

The main rivers of the district were all of Himalayan or sub-Himalayan origin and flow in a southerly direction, their rise being controlled by the Ganges, which formed two-thirds of the western and the whole of the south-western boundary of the district. Next to the Ganges, the most important rivers are the Mahananda, Kalindri, Taugan, Purnabhaba, Pagla and Bhagirath. A feature of the drainage of the district is the line of swamps (bils) which extended along the right bank of the Mahnanda from the Kalindri past the east face of Gaur right down to opposite Nawabganj.

Malda had always been celebrated for the unusual quantity of large game which it afforded and especially for its tiger hunting. Their breeding grounds were the katal (thorny scrub jungle of the barind) and the jungle covered ruins of Gaur and Pandua: their hunting grounds the grassy swamps which covered such considerable areas of the district and stretched away into Purnea and Dinajpur towards the hills. Leopards were fairly common, particularly in the vicinity of English Bazar and Malda, where the undergrowth in the mango gardens and the deep ditches of the mulberry fields gave them sufficient shelter. Hog-deer were scarce; a few were to be found in the Shirshi and Singabad jungles. Wild pigs were once abundant but by the beginning of the twentieth century were not found in great numbers.

The game birds of the district were jungle fowl, swamp and black partridge, button quail, green pigeon, pea-fowl and lesser florican, the last two being somewhat rare. Two varieties of geese were found, the bar-headed and pink-beaked, and among ducks the brahminy, mallard, red-headed pochard, pin-tail, merganser, pearl-eyed and grey were the most common, beside these were found the common blue-winged teal, whistling teal, cotton teal, grey and golden plovers, four varieties of snipe and the usual waders of Bengal.

The rivers and bils of Malda contained good quantities of fish, of which may be mentioned the mullet, rahu, katla, chital, sir, boail, nanin, magor, saul, hilsa and varities of crabs, prawns, eels, turtles, and rays. Bhetki were sometimes met with. Snub-nosed or man-eating crocodiles were very plentiful, particularly in the tanks and ponds of Gaur. The fish-eating alligator or gharial was common in the rivers, where also porpoises abounded.

Land subject to inundation had usually a covering of Tamarix and reedy grasses, and in some parts where the ground was more or less marshy Rosa involucrate was plentiful; few trees occured on these inundated lands; the most plentiful and largest was the hijal. Some portions of the bārind were covered by the jungle locally known as kātāl. This consisted chiefly of thorny scrub bush-jungle mixed with an abundance of pipal, bar or bat, simal and pakur trees and nipal bamboos. A species of thorny bamboo known as beurbans was common in Pandua, and there was a considerable wood of sal near Pakurhat: palmyra trees were also common. Others are nim, jack fruit trees, tamarind, pipal and mango. Dense thickets of this nature were a feature of the uncleared embankments of Gaur. The western half of the district was particularly suited to the growth of mulberry and mango. In the wide fields of the diāra the babul and ber trees were fairly plentiful. Other trees common in the western half of the district were the date palm and the palmyra palm. [29]

CHITTAGONG

The district of Chittagong was the most southerly district of the province of Eastern Bengal and Assam. The central part of the district was a wide plain of rich soil built up by the silt of the Karnaphuli and Halda rivers. The western part of the district was walled off from the central plain by the broken ranges and spurs of the Lama hills, but the general appearance was the same, broad and well cultivated valleys, thickly, studded with low ranges of hills, which for the most part ran parallel to the coast, and were covered with evergreen tropical forest. The delta of the Matamuhari River towards the south was intersected by numerous large tidal creeks opposite the islands of Maiskhal and Kutubdia, and in vegetation and general appearance bore a great resemblance to the Gangetic Sundarbans. Here new land was constantly forming, which soon got covered with mangroves – scrub and palms. Large areas were under natural jungle. The prominent characteristic of the country lying to the north east of the Bay of Bengal was a succession of low ranges of hills, running in a south-easterly direction parallel with each other and the coast line. The sandy jungle covered hills, and the rivers meandering through verdant plains, interspersed with groves of bamboos and betel-nut palms, presented some very picturesque scenery.

The rivers from the north to the south were: Fenny, Karnaphuli, Sangu, Matamuhari and Naf. The higher portion of the Chittagong hills was covered with dense, often rather dry forest; while the lower portion was to a great extent under brushwood. Between the hills lay the cultivated river- valleys, and between these hills and the sea was a narrow strip of rice land, with a muddy sea face towards the north as in the adjacent portion of the Sundarbans. Further to the south was a series of low flat islands skirting the coast, while the shores had the same mangrove vegetation and sea fence as in the Western Sundarbans. On account of the varied conditions, the vegetation of Chittagong was extremely rich and diversified.

The tun locally called surajbed, gurjan, jarul, nageswar, gamhar and chaplas. The checkarishi also called Chittagong wood or Mahagony, and several species of oak, an elm and a chestnut were noticed here. Canes and bamboos grew luxuriantly; among these the curious berry – bearing bamboo (Mbcanna bambusoides) was seen here.

The scenery in some places, where the forest is in a natural state, was the most beautiful. "The mountains," writes Sir Joseph Hooker in his Himalayan Journals "abound with the splendid timber trees of the Cachar forests, they have magnificent gurjan trees. This is the most superb tree we met with in the Indian forests; it is conspicuous for its gigantic size, and for the straightness and graceful form of its tall, un-branched, pale grey trunk, and small symmetrical crown. In the coast and low islands that fringe it, are found scanty vegetation of Ischoemum and various grasses and litteral or swamp forests are seen. Guttia is abundant; nunia is also common, salt being obtainable from the stems by lixiviation. The lower hills are covered with dense but often rather dry jungle largely composed of gigantic trees like the gurjan, oaks myrtles and chestnuts. Palms are rather plentiful and a Cycas is abundant; in the damper forest palms are still more plentiful and a species of ficus abound. Casurina equisestifolia finds its northern natural limit on the southern coast near Cox's Bazar."

Writing in 1786, Sir William Jones described Chittagong as a noble field for a naturalist. In few, if any, districts in Bengal was there such a range of animal, bird, fish and insect life found, being often allied to those of Burma and different from those seen in Indian proper. Among the large carnivora were tigers and leopards, which are found throughout the district. Leopards, including black and clouded leopards were especially common, finding shelter in the numerous hill ranges. Bears (Melursus labiatus) were also found, but were rare. Wild cats of various kinds (golden, clouded, marbled leopard cats) abounded; but they are very destructive to small games and to domestic animals like sheep, goats and poultry. The Indian bear cat (Artictis binturong) and the large Indian civet were also found and there were several varieties of the mongoose family, including the crab mongoose. Wild dogs were also present. Wild elephants were found in the district, which were very destructive. Wild cattle, also Gayal or Mithun were found in the same tracts as elephants. Sambar and barking deer were found throughout the district and spotted deer in some localities. The Sumatran rhinoceros, which had two horns and a hairy coat, had been caught alive on several occasions. The Burmese forest goat had been seen near the hills of Dhobasarai. Among the monkey tribe there were the white-browed gibbon (Hylobates hoolook), the snow lemur and long tailed langur. Other mammals were the Indian fox, jackal, hag-badger, marten, otter, and scaly ant-eater. Dolphins and porpoises were found in rivers and estuaries. There were several species of squirrels, rats and mice. Porcupines were common and hares found.

The birds of the district included vultures, falcons, eagles, hawks, kites, owls, swallows, swifts, palm swifts and nightjars. Rollers of the Burmese type, bee-eaters and kingfishers of many kinds were found, the brilliant Halcyon fuscus was shot in great

numbers, the skin being exported to China besides these there were broad-bills, hornbills (dhanish, locally), parakeets, love birds (latkans), many woodpeckers, barbets, cuckoos and coucals. Slender bill birds like the sun bird and hopoe were found, while shirks, king crows and Indian mocking-birds are common. There were many varieties of fly catchers, the paradise fly catcher being of great beauty. The blue rock thrush and white headed shrike were noticeable. There are babblers, orioles, robins, warblers, including the tailor bird, wagtail, tit lark, pitpit, and tits and flower-peckers of the hilly regions. The green jay was a prized cage bird. While mainas and Indian magpie were common; pigeons were also common and lark – bush lark and sand lark were seen.

The pheasant family included the Burmese peafowl, polyplectron or pea pheasant and the black pheasant (Mathura). Red jungle fowl were common, but partridges rare, the hill bustard quail and larger button quail were seen. Indian lapwings and stone plovers were found. Woodcocks (shot every year) were found, as were snipes – wood snipe, jack snipe, painted snipe. Along the sea coast were found godwits, curlews, whimbrel, stints and sandpipers. Rails, water hens and coots frequented the watery hollows near the hills. Storks, herons, egrets, bitterns and ilsis were also found. Bar-headed geese and ruddy sheldrake or Brahmani geese visited the coast. Shovellers, pintail ducks, pochards, gadwall were seen (and shot) as were seen the whistling teal, cotton teal and wood ducks. Other water birds like gulls and terns were found. Slummier, noddies and boobies were met with, peahens and cormorant were not uncommon.

Chittagong had a fair variety of reptiles. All the sea snakes were venomous. There were the great hamadryad (often 12 ft.) and python sometimes 20 ft. long. Cobras were common. Among vipers, the daboia, and green rattle snake were to be found. Geekos (shouting) and some monitors (goa samp) were often 7-8ft. long. Crocodiles were common, turtles were numerous.

Fish of Chittagong were numerous. The best eating fish was said to be the rupchanda. A second species known as the harchanda – equivalent to pomphret to Europeans was also found. Mango –fish were common- i.e. the tapsi. Mullets known as anwari ans soles (Sulia) were miserable limitations of the English table fish. Bummalo was found in great quantities. Eels were numerous, a species of Mahseer was found in the hills and large quantities of hilsa were found in the Harbhang river and elsewhere. Sharks (hangar) and rays (sankus) abounded in the seas and estuaries, the ground sharks of the ruddy tidal streams were dreaded. Hammer-head sharks were found in the Rezu river. Saw fish were often caught.[30]

CHITTAGONG HILLTRACTS

The District of the Hill Tracts of Chittagong formed the south eastern portion of the Chittagong Division. The general aspect of the district was a mass of hill, ravine and cliff and was covered with dense bamboo, tree and creeper jungle. The mountains were steep and difficult of ascent; they rose in tapering masses and were narrow at the ridge.

The valleys were covered for the most part with dense virgin forest, interspersed with small water-courses and swamps of all sizes and descriptions, and were as erratic in their configuration as to render any general description impossible. The district was divided into four main valleys, formed by its four principal rivers – the Pheni, Karnaphuli, Sangu and Matamuri and their tributaries.

Throughout the district was very picturesque, the mixture of hill and valley, densely covered with forest and luxurious vegetation, yielded the most beautiful and varied effects of light and shade. The rivers slowly meandering on their way to the sea, now shimmering like liquid gold, and again reflecting in heavy dark shadows every object within reach, all combined to make a picture not easily forgotten.

The River Karnaphuli, known to the hill people as Kyusa Khyong derived its name from the Sanskrit "karna" ear and "phuli" flower, literally ear flower or earring. The river rises in the hill to the north of Lungleh in the subdivision of the Lushai Hill District and has a length of 170 miles. After a most tortuous course through the hills, the river emerged into the plains of Chittagong at Chandraghona, and flowing past Chittagong, flowed into the Bay of Bengal. The scenery from the source of the river to Demagiri in the Lushai Hills District was grand. The river wound in and out between lofty mountains covered with dense forest to the water's edge through precipitous rocky gorges of sandstone, over rapids and falls, and here and there big dark pools where dark and silent waters teemed with every variety of fish. It entered the Chittagong Hill Tracts four miles below Demagiri and the scenery changed to dull and uninteresting. At Barkal the scene changed to one of great grandeur. High cliffs towered on the left bank, the river breaks into channels flowing between forest covered islands, and then opening up into a big pool, dashes down a long stretch of rapids between huge boulders, the bubbling waves breaking through the rocks with fitful roar of a surf-heat shore. The next point of interest was a gorge, ten miles above Rangamati. Here the river flowed between dark cliffs of a brown vitreous rock, patched and mottled with litchens and mosses of various colours, towering up on either hand; while occasionally on the right or left, shot back a dark gorge of impenetrable jungle. Just before the river finally left the hills and debouched into the plains the scenery was exceedingly pretty and most refreshing in contrast to the dead level monotony of the scenery of Eastern Bengal. The important tributaries of the Karnaphuli were the Kaptai, Rhainkhyuong, Subbalong and Thega on the left bank and Chengra, Kasalong and Harina on the right banks.

The Sangu River was in the south of the district Sangu. Captain Lewin thus describes the scenery on the Twine Khyong, a tributary of this river: "The stream ran briskly in a narrow pebbly bed between banks that rise nearly perpendicularly, and so high that the sun only came to us in glints here and there. Enormous stem of the garjan tree shot up without a branch like white pillars in a temple; plantains with their broad drooping fronds of transparent emerald, broke at intervals the dark green wall of jungle

that towered up in the background and from some guarded old forest giant here and there, the long curving creepers threw across the stream a bridge of nature's own making."

"Scarlet dragon flies, and butterflies of purple, gold and azure, flitted like jewels across our paths; while silvery fish streaked with dark blue bands, flew up the stream before us like flashes of light." There are two small lakes; the Bogakine and Rhainkhyong.

Elephants existed in great numbers. The two horned variety of rhinoceros (Rhinoceros sumatranesis) was to be met with in the valleys of the Thega and Kasalong rivers. Gyal or mithun (Bos frontalis) were still fairly plentiful in the early twentieth century. Buffalo (Bos bubalus) though rare were found in the upper reaches of the Pheni, Chengri, Miami and Kasalong rivers. Sambar (servus unicolor), serow or Himalayan goat (Nemorhadus bubalinus) and the ribbed face or barking deer (Cervulus muntjac) were found throughout the district. Wild pigs (Sus cristatus) were common. The tiger (Felis tigris), leopard (Felis nebulisa), Himalayan Black Bear (Ursus torquatus), a sloth bear (melursus labiatus), Malay bear (Ursus malynus) and a variety of cats, including the golden cat (felis temmincki), leopard cat (felis bengalensis), marbled cat (felis marmorata), jungle cat(felis chans), fishing cat (felis viverrina), Binturong (Arctictis binturong), Indian civet (Vivera zchetha), palm civet (viverra paradexurus), Luisang (Viverra linsanga), mongoose (Herpestes) and hare were also found.

The monkey tribe was strongly represented by the Huluk or white browed gibbon, Himalayan monkey, brown stumped monkey, Himalayan langur, capped monkey and Lemur. The Indian wild dog considered a great scourge levied a heavy toll on all games. Among the smaller animals were found the jackal, fox, armadillo, grey and bay bamboo rat, field rat, musk rat, house rat, large dark brown squirrel, red squirrel, flying squirrel, otter, flying fox, rats and mice. Drengo, shrike and swift were found. Birds such as bulbul, babbler and thrush abounded here. Other birds were the barbet, weaver bird, hawk, cuckoo or "brain fever bird", copper smith, dhayal, fly catcher, hoopoe, koel, night jar, nutmeg bird, pekio, robin, sibia, sparrow, purple honey sucker, wagtail, cotton teal, whistling teal, paddy bird and bogla.

There were fourteen varieties of poisonous snakes of which the living cobra (Naia bungurus), ran to 12 ft. in length. The cobra (Naia tripudians), northern hill krait (Bungarus bungaroides), branded krait (Bungarus fasciatus), common krait (Bungarus candidus), coral snakes, slender coral snake, small spotted coral snake, large-spotted viper, Gay's viper, Formosan viper, Jerdon's viper, green and Russell's viper were the other poisonous snakes. The harmless snakes abounded in great variety – eg. rat snakes and rock snakes. Pythons over 20ft. could be secured. Both garial gangeticus and crocodile porosus were to be found in the lower reaches of rivers. The Goashap or Iguana lizard grew to a large size. River turtle and land tortoise were to be found. The smaller lizards were the chameleon and gecko and Bamini as also house lizards.

The principal fish were mahseer, Kohn, Kalabaus, Mirghal, white carp, Catla, Bawal, Geonch, Chital, Butchwa, Beckti, Chiliva besides numerous fry of sorts. The dolphin (Platanista gangetica) was most destructive to fish. Eels, turtle and fresh water turtles were also caught in considerable numbers.

The large number and varieties of bamboos was striking, and they included bambusa lutda, vulgaris, arundinacea, auriculata, as well as melocanna bambusoides, Teinostachyum dullsa and others. Canes of various species, Kuruj pat and a coarse thatching grass known as Sunn were common products. Orchids and ferns grew everywhere in great variety.

Some of the better known trees found here were Chalta, Champak, Chaulumgra, Kamdels, Nageshwar, Chilaumi, Suiral, Udal, Nul Bhadi, Pitraj, Chickrassi, Tun, Kusum, Jarul, Tali, Banderkula, Com, Gals, Gumber, Chaplis, Lakuch and Kathal.[31]

MYMENSINGH

The district of Mymensingh, the largest in the Presidency of Bengal lay almost in the centre of the Ganges-Brahmaputra-Meghna delta. The two banks of the old Brahmaputra from the foot of the Garo Hills to Bhairab provided the highest land in the district. The next division was the Madhupur jungle. The characteristic tree here being the bastard sal (gazari). There was a small tract near Gupta Brindaban in which the sal and the scrub jungle gave way to massive trees covered with orchids and creepers. In some of the Sherpur, Haluaghat and Durgapur villages, small hillocks, the outlying portion of the Garo Hills were covered with thick jungle. Mymensingh villages which lay near the hills were extremely flat, and there were unusually long unbroken stretches of paddy land. There were a few trees, and the khals were very narrow, but extremely deep down in their beds and difficult to cross.

The Jamuna, the old Brahmaputra's most important offshoot the Jinai, the Bangsha formed a natural barrier to the Madhupur Jungle on the Tangail side all the way from Madhupur to Mirzapur.

The most striking points of the botanical products of the district were the extraordinary number of trees of all-round utility and the semi-wild state in which they grew. In the Nator estate in the Madhupur Jungle the gazdari or bastard sal was zealously guarded and made the source of huge profits. The giant trees, like the banyan, tamarind, pipal, and aswatha for the most part grew at the corner of fields, on bits of waste land used for shrines and haats, or in the middle of villages.

The chief fruit trees of the district were the mango (Bengali Am, Latin Mangifera indica), Jack (B. Kanthal, L. Artcocarpus Integrifolia), Litchi (B. Lichu, L. Nephelium), Tamarind (B. Tetul, L. Tamarindus indica), Peach (B. Saptalu, L. Prunus persica), Guava (B. Sabri-Am, L.Psidium Guyava), Limes, (B. Lebu, L. Citrus Medica), Pomelo (B. Jambura, L. Citrus decumana), Plantains (B. Kola, L. Musa sapientum), Pineapples (B. Anaras, L. Ananas sativa), Custard apple (B. Ata, L. Anana squamosa) Monkey's apple

or Bulloch's Heart (B. Nona, L. Anna reticulate), Bel, (L. Aegle marmelos) and various kinds of plums which grew practically wild. The most important fruits were certainly the plantain and the jack fruit.

Mymensingh abounded with varied fauna and thus was a hunter's paradise. In the middle of the nineteenth century the chars in the north-west contained as many tigers as any district in India and rhinoceros were occasionally shot. Tigers were still numerous in the Madhupur jungle and at the foot of the Garo Hills in the early twentieth century, but without plenty of elephants they were difficult to get. Bears came down from the hills in the jack fruit season. Wild elephants used to work havoc in the northern villages. Wild buffaloes were not unknown in the grass jungle north of Kalmakanda and in the north-west of the Madhupur Jungle. Sambhor (Rusa aristotelis), barasingha (Bucerius duvancellii) hog deer (Axis porcinus) and barking deer (Cervulus vaginalis) were all found. The Garos caught sambhar in nets and shot other deer from hiding places near their drinking holes which was extremely objectionable to the colonial power. At Bausan not far from the Mymensingh-Sylhet border there was a small scrub jungle where hog deer were very numerous. The Bandor or Morkot monkey was common in the Madhupur jungle. Hooloocks or gibbons could be heard calling at the foot of the Garo Hills. The pig was seldom to be found. Among the smaller animals the mongoose and the civet cat (baghdash) were extraordinarily common. Hares, as well as foxes and jackals, could generally be found on an open char. The black rabbit (Lepus hespidus) used to frequent the Madhupur jungle. Otters were common.

The chief game birds were the red jungle fowl, which could be seen feeding in the evenings at the foot of the Garo Hills in parties of ten or more. They were very numerous round Singerchala, Jugircopa, Salgrampur and other places in the Madhupur jungle. Peacocks lived in a regular colony in Kalidas, a village of the Madhupur jungle. Quail occurred in small numbers in many scattered parts of the district, and the blue-breasted quail (Excalfactoria chinensis) and grey quail (colurmix communis) were sometimes met in large flocks near patches of grass jungle, feeding in the recently cut paddy fields at the foot of the hills. Other birds which occurred only or chiefly near the hills, were the swamp partridge or kaya (Francolinus gularis), the black-breasted kalij, or pheasant (Durug among Garos and Mathura among Bengali shikaris) and possibly the rare wood snipe (Gallinago nemoricola). The large egret (Heroclias alba) was a conspicuous inhabitant of the Durgapur swamps. Among other birds, the black-winged kite (Elanus melanopterus), the swallow shrike (Artamus fuscus) and the lesser coucal (Centropus Bengalensis) were found in Durgapur and probably nowhere else in Mymensingh and the Khaliajuri pargana.

From November till the first warm days of February pintail and many other kinds abounded in the jungle growing close to the edge of the lagoon shaped bils. After March the spot billed duck (Ancus parcilorhynca) was the only variety that stayed on in any number. It and the rarer pink headed duck (rhodonessa caryophyllacea) bred in the

district. On the chars of the Jamuna there were all varieties of duck, including the rare Sheldrake (Tadorna cornuta), but they are much harder to approach. The bar-headed goose (Ansur indicus) arrived in about the first week of November and was difficult to get. It was only towards the end of February when they are preparing to depart from their favourite chars that they occasionally allowed a country boat to bring them within reach of a gun. The grey goose (Anser ruburostus) was only seen early and late in the season, suggesting that it only halted en passant. On the Meghna in about November large flocks of ruffs and reeves (Machetes pugnari) arrived; the males had by then put off their breeding plumage from which they got their name, but are conspicuous by their large size. The bittern (Bolaurus stellaris) was found occasionally and the crane or koolong (Grus cinerea) was also a winter visitor.

The marsh babbler (Megalurus palustris), Brahminy kites, and often fish eagles and ospreys, and in the rivers close by there are the flocks of the curious scissor-billed tern (Rhyncops albicollis) were found. One large gull (Larus brunneicephalus) was found in winter and spring in all the large rivers. Of the eight storks found in India all except the white stork, the marabout and the black stork were to be seen on the chars of the Jamuna, the commonest being the adjutant (B. Hargila, L. Leptoptelus dubius), the painted stork (gangchil) and the white-necked or beef-steak stork (manikjor). The spoon bill (L. platelia leucordia, B. chamuch buza) was seen near Porabari steamer station. Among the smaller wading birds the avocet (L. recurvirostra avocetta, B. kusya chaha) was not uncommon. The green-shank, the little green shank (sotanus stagnatilis), the red shank (sotanus kalidus) and the grey plover (Squatorola helvetica) were found occasionally. The Indian lapwing (Sacrogramnus indicus, B. tili) was ubiquitous in the big river. Of the smaller birds the little ring plover (Aegialtis dubia), the spotted sand piper (Sotanus glavola), the common and the green sand pipers (Sotanus hypolencus and S. ochrops), the swallow like small pratimcole (Glareola lactica) and the little stint (Tringa minuta), "goggle-eyed" plover were all common. Snipes were plentiful. Others were bulbuls, orioles, Leiotrichinae or the white-eyed tit, the Indian grey tit, tit babbler, yellow-breasted wren babbler, tailor bird, the greenish tree warbler, mynas etc. The black-headed shrike (Lanius nigriceps) and the grey-backed shrike, the cuckoo shrike, the large cuckoo shrike (Grauculus macei) was a striking inhabitants of the open parts of the jungle. The koel (Eudynamics honoratus) was common throughout the jungle. Blue canary was fairly common in the thick jungle. Mymensingh district had proved to be unexpectedly rich in these small birds like ruby cheek, red honey-sucker, sun-bird etc. Blanford's yellow-backed honey-sucker was very common. The Indian-bush cat, was found commonly on the outskirts of the jungle. Woodpeckers were common, the barbet and the roller (blue jay) was common everywhere. White-breasted king-fisher, was found often far away from water in dense and dry jungle. Rose-ringed paroquet, eastern blossom-headed paroquet were found. The osprey was common on the bils on the outskirts of the jungle. Bengal

green pigeon and the orange-breasted green pigeons were common. In short, Mymensingh was a haven of wild animals and birds.

The banded krait easily distinguished by its broad black and yellow bands was found. A poisonous water snake Hydroptus Nigrocunctus, distinguishable by its flat tail, was reported to be common in the Meghna. Pythons were found. Lizards and guisaps of all sizes inhabited patches of jungle and were found even in the towns.

FISH – Most of the rivers and bils swarmed with fish, and as soon as a drop of rain had fallen, fish was found in every paddy field and ditch.[32]

NOAKHALI

The district of Noakhali had a multitude of tanks of every size while brick built mosques, white plastered, and exceedingly numerous helped to break the monotony of the plain and grove. The chars of the oldest formation presented much the same appearance as the mainland. On the west and south of the district and between the islands flowed the Meghna, and on the east the Feni sub-division was drained by the great and little Feni river. The northern and central portions of the district were lower than the banks of the Meghna. It is suggested in Hunter's Statistical Account of the district that these depressions could have been due to the great earthquake of 1762. Tanks formed a striking feature of the district. In every village were found numerous large and small tanks.

The peculiar vegetation of the Sundarban was represented here but sparingly and plant life also consisted of varieties belonging to the lower Gangetic plains. The luxuriant growth of palms was the most characteristic feature of the vegetation. The Supari (areca catechu), became more and more abundant towards the west of the district and grew almost in all forests along the Meghna above Lakhipur. It was unvariably accompanied by mandar (Erythina indica) a thorny tree that served to shade the young betel nut. The coconut (narikel) was also very common in the west of the district and on the islands, and the toddy palms (Borassno flabilli formis) or tal and the date palm or khejur, were to be seen in most parts. Mangoes grew freely, the almond tree (baddam), bat, Azadirachta indica, Diospyros embryopteris, Eloecarpus serratus, Artocarpus chaplasha, Dipterocarpus turbinatus, ulu or chhan was obtained in the mainland and islands.

Large carnivores were scarce but tiger and leopards from the Tippera State occasionally descended from the seventh border, spotted deer and hog deer frequently committed depredations on the crops in the same locality. The only large animals belonging to the district were the wild buffalo and wild pig. The wild buffalo was found in Mir Muhammad Ali. Wild pigs were found on the char in large numbers and in smaller numbers on the Meghna chars in the Lakhipur thana and in other parts of the district.

Flocks of bar headed geese appeared occasionally on the Meghna. Wild ducks were scarce but snipe were to be had during cold weather in the Feni subdivision. Large flocks of curlew were seen and terns, cranes, many species of fish eagle, hawks, herons and other water fowls were also found.

A number of crocodiles were to be found in the Meghna and especially in the sandbanks to the west of Hatia. Snakes were common in Sandwip, and no less than five varieties of cobra were recognized in the district – Phanak, Khoia Phanak, Banka, Dudhga Bahar and Tilakya Bahar. Other poisonous snakes were the Sankhini (baingaru fasciatus) and the junglebord and urgabord (Callophus macclellandii) the kuchabord (Trimeresureus carinatus) was less deadly.

There are many species of sea and fresh water fish in the rivers, tanks and creeks. The saw fish (Kharag) are often caught in the estuaries.[33]

TIPPERA

The district of Tippera lay in the most northerly district of the Chittagong Division. Everywhere the village sites were well wooded but the trees were more numerous and luxuriant and their character more tropical in the south west. The traveller who glided down the Meghna from Chatalpur to Chandpur could'nt fail to observe the gradually increasing richess and luxuriance in the growth of palms and other trees. Some of the villages were buried in veritable forests where the stranger could lose his way.

In the north and west of the district were numerous marshes (bils), some very large. Thus in the Sarail pargana the Mediyar Haor covered ten sq. miles and Hatia and Kajila three sq. miles. The rivers of the district could be divided into four different groups. The first, consisted of Meghna and its offshoots, the second, of hill streams and torrents descending from the ranges in Hill Tippera, the third, of streams flowing from one river to another, and the fourth, of the river of the south.

The Meghna was a mighty rolling flood of great depth and velocity, sometimes split up into half, a dozen of channels by sandbanks of its own formation, sometimes spreading out into a wide expanse of water which the eye could not see across. It was navigable throughout the year but navigation was difficult and sometimes dangerous. The offshoots of the Meghna were the Titas, Pagli, Katalia, Dhanagada, Matlab and Udhamdi. The most important hill streams were the Gumti, Howrah, Kagni, Hari Mangal, Kakdi, Balujuri, Sonaichari, Jangalia etc. The Feni and Dakatia were important rivers of the south.

The principal trees of the district were the Banyan, bat in the vernacular, the Pipal or Asathwa, the nim, the bel, the tamarind (amli or tetul), the amaltas, the rana or petraj, jam or Indian blackberry, the jarul, the cotton tree, simal, the mandar, the mango and several species of palms.

Wild animals were scarce and there was but little game left except in the Lalmai hills and the uplands adjoining the Hill Tippera ranges by the early years of the twentieth century. The Lalmai hills had a good many hares and a few barking deer and an occasional leopard, and on the eastern border tiger, leopard, wild hog and several species of wild cats. Jackals abounded. The mongoose was common but there were a few monkeys and squirrels to be seen. Bird life was luxuriant. Fish, eagles, kites, brilliantly

coloured kingfishers, snippets and other water fowls thronged around the marshes and there were paddy-birds. Then there were the golden orioles, crested bulbul, king crows, crow pheasant, wood peckers, iridescent sun birds, sparrows, a host of fly catchers, and of course the ubiquitous myna. The game birds of the district included jungle-fowl, wild duck, teal, golden plover and snipe, which afforded a fair sport in the winter months.[34]

PABNA

The district of Pabna occupied the south-east corner of the Rajshahi Division and in shape, the district resembled an irregular triangle, lying at the head of the Bengal delta within the angle formed by the confluence of the Ganges and Brahmaputra. It was a wide alluvial plain, but not altogether uniform in character. The succession of well-cultivated tracts of open country, with occasional clumps and lines of trees and with villages embedded in foliage, was not devoid of a certain quiet beauty. The scenery along the Padma and Brahmaputra had a special character of its own.

The river system was constituted by the Padma and Brahmaputra with their interlacing offshoots and tributaries. The whole district was covered by a network of minor watercourses, which rendered most parts of it accessible by water during the rainy season. In addition to these following streams, the interior was streamed by the deserted beds of old rivers, most of which were dry except in the rains. Chars and diaras were seen.

Where the ground was not occupied by the usual crops of north Bengal, it was covered with abundant natural vegetation. Land subject to inundation has usually a covering of Tamarix and reedy grasses; and in some parts, where the ground was more or less marshy, Rosa involucrate was plentiful. This rose calls for special mention. It frequently occurred in the neighbouring districts of Dacca. The country was on the whole well wooded with bamboo clumps and banyan, pipal, babul, red cotton, jack, bel, tamarind, coconut and the date palm trees. The villages were generally embedded in thickets and shrubberies of semi-spontaneous and more or less useful trees, while waste lands were, for the most part, covered with grasses. There were no forests, but there are extensive patches of jungle in the north and north-west of the district. The chief trees were the mango, jack, jamun, cotton tree, mahanim or panya and pitlaraj, and the babul. Bamboos were abundant and furnished the most common material for house-building. The ulu grass was also used.

The large game of the district consisted of buffaloes and deer, both of which were rare, and of tigers, leopards, and wild pigs, all of which were plentiful. The wild pigs in Pabna were both numerous and of large sized, and pig-sticking has long been a favourite sport of the European residents and visitors. But by the turn of the century the situation changed. Wild buffaloes, deer and tigers had disappeared with the advance of cultivation; it is said that a man-eating tiger was killed at the close of the nineteenth century after it killed several persons and caused a panic near the town of Pabna. Leopards and wild pig however were still plentiful. Wild pigs swarmed in some parts and were a curse to the

cultivators. They were most frequent in the river chars. Other common mammals were that ubiquitous scavenger the jackal, the mongoose, the ruddy mongoose, the jungle cat, civet cat and toddy cat, the porcupine, the fox, hare and two varieties of otter.

During the cold weather the grey lag goose, bar-headed goose and black-headed goose or comb-duck visited the district, but they were wary and difficult to shoot. Several varieties of ducks could also be distinguished, eg., the pintail, sheldrake, shoveller, gadwall, pochard, mallard, spotted billed duck, and the familiar brahmini duck or ruddy sheldrake, which was commonly seen in pairs on the chars of the Padma and Jamuna. Teal were more common and included the common teal, blue-winged teal or garganey, whistling teal and, commonest of all, the little cotton teal; common, pintail, painted and jack snipe were all found in the cold weather. Water birds were numerous, eg., herons, snippets, coots, dabchicks, redshanks, kingfishers and the small cormorant. Plover and green pigeon were frequent and the common grey quail and button quail were occasionally shot.

Fish abounded in most of the rivers and bils, and very large catches of hilsa were made in the Padma in the rainy season. There are many other varieties of fish. The most valuable belonged to the carp family, such as rohit or rui and mirgal, or consisted of Siluridae or cat fishes, such as boail and magur.

The physical features of Bengal give an idea about the tremendous diversity of the land. The khals and bils, the mighty Ganga, Padma and Meghna triumvirate, the immense Bengal delta, the varied geology of the region, as well as the variety of its flora and fauna was bound to have a bewildering effect on the English. This was something which overwhelmed those who were accustomed to the relative monotony of the English country-side. It was natural that the process of trying to fathom, understand and eventually control the region would start almost immediately after assumption of political power.[35]

MANAGING A WILD LANDSCAPE

The wild landscape that the English encountered in Bengal and in the rest of India was juxtaposed to the European ideas of order and discipline hence began the process of ordering and disciplining this site. The cause of ‘improvement’ taken up in England by George III after 1783, continued in the reign of George IV and this criterion sustained and guided both state initiatives at ‘home’ as well as in the colonies. Against the backdrop of this should be assessed the colonial government’s endeavour to transform the ‘jungles’ of India into well- ordered entities much in the image of the forests that existed back ‘home’. The term ‘jungle’ is of Indian origin which made its way into the English lexicon and means ‘tangled mass of vegetation’ according to the Oxford Dictionary. It was a chaotic domain, of bewildering complexity and hence antithetical to the colonial scheme of governance. This was a site which needed to be commanded and

controlled and thus unfolded the process of bringing order in this site. The Great Rebellion of 1857 led to a crackdown on all 'disorderly' things and the jungles which personified disorder was sought to be ordered and this was done by legislation as well as extermination of wild animals which were perceived to be detrimental to a settled agricultural society. Moreover legislation would also confer the legal rights of this site into the hands of the colonial government who could then exploit the vast natural wealth of this space exclusively. Therefore colonialism in India initiated fundamental changes in patterns of resource use, notably that of the forests.

The Company Raj came to Bengal armed with a certain conception about its woodlands, that of a chaotic site, a landscape of 'impenetrable jungles' infested with ferocious beasts and obnoxious pests, a space which lacked stable agriculture and in which lived some 'uncivilized' natives. Bengal was the first region conquered by the English and therefore it was here that the Company's government intervened at first. Human history has always witnessed a tussle between man and beast but the conflict became sharper with the coming of the Europeans. Converting jungles into arable land to feed and accommodate an ever growing population was nothing new but now the fight was to the finish. The Bengal of the 1770's intensified the conflict between man and beast. The famine of 1770 in eastern India wiped out nearly one third of her population; this resulted in land lying fallow and the secondary growth of vegetation on which thrived deer and wild boar and their chief predator, the tiger.[36] Bounties were announced to kill the beasts that preyed on draught animals and endangered human life and thereby impeded agriculture and in turn also led to a decrease in revenue. Eliminating 'vermin' was thus an avowed objective of the colonial authorities, as they not only affected 'self-interest' by affecting revenue collection they also defied the notions of 'order'. The most pugnacious of the mega animals was the tiger which dared to eat human flesh and thus faced the greatest wrath of the white rulers.

Chaos in no domain could be tolerated as it stood in complete contrast to the colonial quest for 'order', hence the jungle needed to be 'managed' by imposition of laws in an era where laws was held to be sacrosanct. However before legislations it was mandatory to possess knowledge about the colony and its woodlands and this began almost concurrently with the English entry into the country. This development of colonial knowledge was influenced by the development of earth and plant sciences, landscape aesthetics, and hunting attitudes in Europe.[37] But the diverse colonial situations also needed to be accounted for in this formation of knowledge, using yardsticks that were primarily European in origin would not give the desired result. This was true of Bengal as it was in the other parts of the country. A thorough knowledge of the colony was imperative to initiate the process of governance in it. The middle of the nineteenth century saw the accumulation of this knowledge through topographical, geological, botanical and zoological surveys, empirical enquiries were conducted by the Raj to learn about the colony and the decennial census was introduced. These endeavours were all

aimed at the collection of information about the subject country to create a compendium of knowledge which would facilitate the process of command and control. The process of accumulation of knowledge about wild India was not confined to the initiatives taken by the government alone, individuals and organizations like the B.N.H.S., various clubs like the Planters' Club and Tent Clubs added to this cauldron of knowledge. The B.N.H.S. journals from Vol.22 to Vol.40 spanning over nearly two decades of the first half of the twentieth century record the Mammal Surveys conducted by it. So surveying was a continuing mode of discovery of colonial knowledge.[38] In woodland Bengal, the work of surveying was never finished, it became the decisive discovery, a mode of knowledge that co-existed with and shaped the cataloguing, managerial, developmental modes of knowledge throughout the nineteenth century.[39]

The botanical and zoological surveys, tree plantation and timber conservancy, the setting up of the Botanical Garden in Bengal in the lines of the Botanical Garden at Kew were measures aimed at knowing and ordering at the same time. The basic objective of introducing legislation in the woodlands was to control a chaotic site on the one hand and establish sole authority on it on the other, thereby facilitating the exclusive use and even 'abuse'[40] of the space. An important feature of the ordering of landscape during the colonial period was the continuous re-drawing of the boundaries of the wild-land. The pragmatic compulsions of extension of agriculture led to the process of making incursions into the woodlands, therefore one sees a continuous effort of conversion of the wild space into cultivated space. The exercise became much easier with the conversion of the jungles into forests, a phenomenon best witnessed in North Bengal, where Reserved Forests were de- reserved for the extension of tea gardens. In a letter written by Lt. Colonel H. Boileau, Deputy Commissioner of Jalpaiguri to the Commissioner of the Rajshahi Division on 17th May, 1893, we find a reference to this. He writes:

"*The proposal to abandon the Government Forest Reserves and make them into tea gardens is one that does not recommend itself to me. The proposal practically amounts to the abandonment by government of all the Reserved Forests in the district, as well as in the greater part of the Darjeeling district for there can be little doubt that all such forest land would be taken up within a very short period were the proposal entertained by the Government.*"[41]

During the early years of the Company Raj i.e. the period between 1795 and 1850, the forests were chiefly viewed as limiting agriculture, so this period saw a great deal of forest destruction. In Bengal forested lands, were classified as wastelands and included in zamindari (landlord) estates.[42] In fact in the whole of eastern India the area under forest began to shrink as part of the process of colonialism. The British empowered local zamindars (landowners/landlords) to tax and control indigenous communities during the nineteenth century, and encouraged local communities to clear forest for cultivation. Sometimes the clearing of forest for agricultural land was undertaken by migrant tribal labourers, such as the Santals in Bengal, and financed by the zamindar until the land

became productive. In this way, forest loss facilitated the creation of villages which then became subject to the collection of revenue. The East India Company not very intent on introducing extensive changes in the early years of its rule continued with the existing practice of the Indian rulers of selling blocks of forests or individual trees to timber merchants for a fixed down payment which however led to waste and destruction of trees.[43] No attempts to introduce forest conservancy in Bengal were made till the Revolt of 1857. In fact in 1853 was initiated the Bengal Wasteland Rules which alienated large areas of forest lands for purposes not always connected with the exploitation of forest products. Sometimes allotments were made to encourage particular forms of cultivation, in other cases they farmed out the collection of banker (forest tolls), as had been done in the Sundarbans where banker blocks were demarcated and sold on five-year leases.[44]

The attitude that the Indian wilderness impeded agriculture and thus could be exploited indiscriminately slowly gave way to state-sponsored regimes of scientific resource management.[45] Conservation of forests was directly related to the fear of diminishing timber due to reckless felling of trees and this was a worldwide phenomenon. Much before conservation was formally inaugurated in British India, Alexander Gibson was appointed as the conservator of forests of the Bombay Presidency in 1847 and the chief reason for this was to ensure enough timber for the British navy as the state of the Bombay forests was extremely bad. So the prime factor which was responsible for the initiation of conservation in colonial India did not arise out of an altruistic concern for nature but a more mundane concern for timber, minor forest products and wild animals, in short the wealth of the forest.

As the process of colonialism advanced, natural resources came to be increasingly commoditised, and to serve the needs of the empire, began to flow out of the subcontinent. Trees such as Indian teak were highly prized, notably at times of conflict, such as the Napoleonic war. Perhaps the most notable use of timber was in the construction of the Indian railway system. In the fifty years between 1860 and 1910, railway tracks increased from 1349 Kms to 51,658 kms. For every mile of track laid, 860 sleepers were required, which had an expected lifespan of approximately 12 to 14 years. In the 1870's, it was calculated that every year one million sleepers were needed. Indian trees, particularly sal, deodar and teak were preferred as sleepers, for their perceived strength over other Indian timbers, so it was these three species that were intensively exploited. Much sal, was extracted from the forests of the Jungle Mahals of Bengal and Bihar for the construction of local railway lines, and the main line Bengal-Nagpur railway in 1898. While sal was initially found to occur in abundance near the sites of railway construction in the Indian peninsular, it's over-harvesting necessitated procuring other species, notably deodar from the forests of the north-west Himalaya. The demand for timber, most notably for railway expansion was seen to intensify and necessitated extraction of timbers much further afield, while also stimulating and facilitating commercial demand. In some zamindaries, such as Midnapore in Bengal, timber

merchants rushed to purchase and lease large tracts of forest land, reflecting the increasing value of forests. The shortage of useful timber created by the demand for rail expansion was the first indication that, contrary to the belief of the time, India's forests were inexhaustible. The prospect of a diminishing resource base and a need for plentiful raw materials on which to expand the empire must have been behind the colonial drive to manage and control forest resources more effectively. To achieve this objective a suitable organisation, i.e. the Forest Department was formed in 1864. In the month of August of the same year Dr. T. Anderson, Superintendent of the Royal Botanical Gardens, Calcutta was appointed the first Conservator of Forests in Bengal. Thus began the era of conservation of forests in Bengal. In fact it was preservation rather than conservation which was inaugurated in the latter half of the nineteenth century in colonial India and it was preservation with the objective of exploitation, to carve out an exclusive preserve to facilitate monopolistic control of woodland India so as to use and utilize its resources exclusively.

Preservation of trees and wild animals were both guided by the motive of consumption. Trees provided valuable timber and certain animals and birds had great economic value, moreover animals constituted that ingredient which facilitated the best loved and most pursued pleasure activity of the English officials in India; hunting or shikar. If one evaluates the history of preservation in colonial India the motives behind it becomes clear. The elephant was the first animal to be preserved in as early as the 1870's by the Elephant Preservation Acts of 1873 and 1879 (Madras I of 1873 and India VI of 1879). The animal was preserved because it was an economically viable asset. Shooting of only 'rogue' elephants was now allowed. A series of Forest Acts were passed – The Indian Forest Act, 1878, Madras Forest Act, 1882 and the Burma Forest Act, 1902. The Indian Forest Act of 1878 further strengthened the powers of the forest officers and the imperial forest department and enabled the government to bring large tracts of the forest under its control. The wealth of the Indian forest had finally been realized – be it timber, minor forest produce, wildlife or its derivatives. It was now the property of the government. By the turn of the century nearly 20 per cent of British India would be government controlled forests. Controlling the forest meant controlling the wealth of India.[46] As more and more of woodland India qualified into forests the easier became the task of control and command by the imperial power, wild India slowly began to conform to the notions of forests that existed back 'home'. In the 'forests' of colonial India protection or depredation of plants or animals began to depend on the sweet will of the imperial masters.

In June 1864, the Secretary of State for India's office asked for the list of depredations caused by wild animals in different parts of India. The circular was sent to the Government of Bengal to which the Commissioners of the various Divisions of the Bengal Presidency furnished their comments. Based on the information provided by the

Commissioners the Lieutenant Governor of Bengal took a Resolution on 2nd November 1866:

1. Rajshahye- In the districts of the Rajshahye Division, with the exception of Moorshedabad, tigers and leopards are numerous; but the Commissioner thinks that the number is decreasing, and considers the present scale of rewards quite high enough, unless where the death of a tiger is specially called for, and he recommends the reward for each case of this description should be raised to Rupees 25. The Commissioner objects to the general distribution of arms to the people, as they do not know how to use them, but thinks that two shikarees on a salary of Rupees 5 each per mensem, with other advantages, might be employed in the districts of Rungpore and Dinagepore.
2. The Lieutenant-Governor approves of the proposal to grant a reward of Rupees 25 in each case when the special circumstances of the case render it a matter of very great importance that any particular tiger should be destroyed……Care must also be taken to ascertain that the tiger for which the special reward is offered has been killed, and the body of another tiger has been substituted.
6. Nuddea- In the Nuddea Division the greatest number of deaths from wild animals occurs in the Sunderbuns and in the Jessore Districts, where special arrangements for exterminating dangerous animals are impossible, until such time as the forests in the jungle in the Sunderbuns are more cleared.
7. The Commissioner may be desired, if he has not already done so, to authorize officers, who move about the Sunderbuns, to grant the prescribed rewards for the destruction of wild beasts on the production of the heads.
8. Dacca- in the Dacca Division no special rewards are called for, as, owing to the gradual clearing away of all jungle, deaths from wild animals are on the decrease.
12. Chota Nagpore- (In) Maunbhoom, where the people being Bengalees are not given to hunting like the people of the other districts, the mortality from wild animals is consequently great.
13. The Commissioner may be told that under special circumstances of the case, this proposal to raise the rewards for destroying wild animals in this district to the scale allowed in the Hazareebaugh District has been sanctioned. It is hoped that this measure will induce shikarees to resort to Maunbhoom yo hunt and destroy noxious animals.
14. Burdwan- The Districts of Burdwan, Howrah and Hooghly, in the Burdwan Division, are nearly free from wild animals; but in Bancoorah there are large tracts of woodland and jungle through which run the high road to Juggernanth, whence number of people are said to be carried off by tigers.
15. The Commissioner should compel the owners of land along this road to keep it clear of jungle for 100 feet on each side of the road. The increase of the

reward for each tiger killed from Rupees 5 to Rupees 10 is also sanctioned both for Bancoorah District and that of Midnapore.

17. Chittagong- In the Chittagong Division also the existing rates of rewards is sufficient; but the Commissioner should be told that it is the duty of the Magistrates to keep the returns of deaths caused by wild animals, and of the number of wild animals killed, and to see that the Police are careful and precise in furnishing information under both heads.[47]

Earlier in 1862 much before Forest Conservancy was formally initiated in Bengal H.L. Dampier, ESQ., Secretary to the Board of Revenue wrote to the Secretary to the Government of Bengal, (No. 409, dated the 23rd Dec. 1862) regarding the right of catching elephants in the Government forests:

3. The Officiating Commissioner of Chittagong remarks that it should be distinctly notified that no one has the right to catch or kill a wild elephant (except in self defence) in the Government forests. Mr. Buckland would either let out the Government Koonkies to anyone who might wish to try a Kheddah on his own account, or employ the Koonkies in catching wild elephants for sale, the value of the captured elephants being, in the latter case, set off against the keep of the Koonkies. Owing to the risks he thinks it unlikely that many offers to hire will be made, but if made, he would not take more than 5 percent of the value of the elephants caught in the Kheddah: this value to be determined by a Committee of the Local Officers two months after the arrival of the captured animals at Chittagong, as the mortality is greatest when the elephants are first brought down from the forest. In the hill forests, now forming the jurisdiction under Act XXII of 1860, Mr. Buckland would impose a duty of 5 percent on the value of ivory brought from the hills, and on every elephant ascertained to have been taken alive by means of drugged sugarcane.

5. Mr. Buckland, as Commissioner of Dacca, writes that in Sylhet licenses have heretofore being given by the Superintendent of Kheddahs to private persons to catch elephants at their own expense, 20 percent of the captured animals being taken by Government, and the option reserved at taking more at a price not exceeding Rupees 200……

6. It should be distinctly made known that the right of catching elephants belongs to the Government alone, and that no private individual can capture them except under a license. But the Board would make no monopoly, they would authorize the Local Authorities to grant licenses to any number of persons, if satisfied that the applicant intends *bona fide* to capture elephants for the market and not merely to destroy them for their ivory, and that he has means at his disposal for doing so. The Local Officers may be left to fix the amount of license fee with reference to the value of the privilege conferred. The revenue to be expected from these licenses would be trifling. The main

> object of insisting on a license being taken would be to bind down the hunters not to destroy the animals…… If this condition be not stringently enforced the hunters will certainly destroy for the sake of their ivory those animals which they capture, and which the small number of Koonkies at their disposal cannot bring away.[48]

The two above evidences prove that enforcing the legislations in the forests and carving out government preserves were done to satisfy the needs of the 'self'. If like the rest of the country the wilderness could also be controlled and subjected to laws then all species of plants and animals as well as the people who lived there could be commanded to satisfy the needs of the colonial government. When animals constituted a hindrance to a settled agricultural society they were chosen to be exterminated and when animals like the elephants proved to be prized assets their lives were sought to be zealously guarded,. What is interesting to note is the fact that in both the exercises the help of the natives was an absolute necessity but they were not included in the colonial project of extending governance to wild India, they were merely helpers who would facilitate the imperial plans and projects. In woodland Bengal the same was the case.

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CHAPTER FOUR

THE HUNT

THE BEGINNING

India is nature's treasure trove, the abode of 45,000 varieties of plants and a remarkable diversity of wildlife. The country has since the earliest of times been associated with the tiger and the elephant. However her wilderness boasts of innumerable other faunal species from the Asiatic lion to bison, different varieties of deer and apes, wild dogs, wolves, wild boars, hyenas and cheetahs not to mention the almost thousand bird species that are found here. Man's interaction with this natural world is varied, on the one hand he had to confront the wilderness, overcome threats from fearsome beasts, clear forests, practice agriculture and settle down and on the other the woodlands provided him with innumerable resources – food, fuel and a plethora of minor forest products.

The forests from the earliest of times evoked conflicting responses, one of fascination and the other of consternation and the twin themes of the forest as a place of danger that needed to be resisted and a land of beauty to be admired and enjoyed is a theme found since the ancient times. In one of the earliest documents on wild India, the Ramayana, Kaushalya, warns her son Rama about the wild animals that abound the jungles, before he sets out on his long exile in the forests south of the Gangetic plains. On the other hand, when Sita, in spite of her husband's best efforts to dissuade her, joins him in exile, the forests are depicted as regions of plenitude and beauty. This perception of the forests has continued through the ages.

Early man hunted animals for food, fought and killed them for protection, kept vigil to ward off 'marauders' that destroyed crops and attacked livestock, so there was a constant battle between man and beast for survival. With time the domain of man and beast became distinctly different but overlapped, each encroaching into the territory of the other, so, the struggle continued. As more and more land was brought under the plough, as civilization progressed, man's dependence on wild animals for food decreased, only a few who lived in the periphery or within the forests killed animals for food but they were the marginalized. Hunting continued as a main- stream activity but in its transformed form, from an act indispensable for survival into a 'sport' which became a favourite leisure activity of the elite, the princes, royalty and their accomplices. 'Mrigayas' were undertaken; the hunt became a means of pleasure and relaxation as is evident from the repositories of information on ancient India; the Puranas, the Indian epics, poems and plays of the times. In Kalidasa's Shakuntalam, Act 1 titled 'The Hunt', the charioteer of King Dushyanta, looking at the deer and the king during hunting states:

'I see you hunt the spotted deer
With shafts to end his race,
As though God Shiva would appear
In his immortal chase.'[1]

The Manasallosa written in the twelfth century in the Chalukyan period is perhaps one of the best manuals of the hunt in Sanskrit. It records in detail the technique of deer and antelope hunting including coursing with cheetahs or trapping a wild male black buck by using a tame decoy animal.[2] Hunting was pursued as a leisure activity by those that lived near forests also but theirs was a lifestyle less worthy and hence not found in the records of court poets and writers who were more intent on recording the kingly conquests.[3] With the coming of the iron tools, more and more land was cleared for agriculture and with the emergence of a settled agricultural life animals like the rooster, water buffalo, zebu and the elephant were tamed and domesticated but this did not greatly alter the character of woodland India. Ashoka after embracing Buddhism protected many birds and animals and even gave up the Royal Hunt. This does not necessarily mean that others followed suit but there was the effort even in those early times to protect certain animals. Moreover since the population density was very low, India remained in the ancient times densely forested. The Chinese traveller Hieun Tsang in his travel accounts of the seventh century A.D. refers repeatedly to the immensity of the forests which made travel perilous and difficult. So, in spite of the man beast contest in ancient India, the woodlands remained, even those areas cleared for cultivation and later abandoned due to natural or man- made calamities witnessed a re- growth of jungles.

With the coming of the Mughals to India, hunting or shikar entered another phase. The Mughal emperors and their accomplices used a range of weapons from the bow and the arrow to muskets for shikar. In addition to being a pleasure sport, shikar became a means to tone the body, test one's nerves and learn the fine art of stalking for a militarized, horse-borne nobility.[4] Shikar in the Mughal period was more than a sport, on the one hand it symbolized the ability of the ruler to overcome 'noxious animals' like the tiger, on the other success or failure in shikar(hunt) on the eve of a military expedition was taken to be a omen about what lay in store for the future. Abul Fazl, the biographer of Akbar claimed that the hunt was a means of gathering intelligence about the state of the realm.[5]

The Mughals adopted the older traditions of the hunt but added to it significant new features. What is remarkable about the period is that they kept a record both written and in the form of portraiture of their hunts and escapades in the wild for posterity, documents which are invaluable sources of the wilderness of those times. Hunting was forbidden on certain days and killing not allowed on sacred sites of the Jains. Falconry was practiced, capturing cheetahs in pit-fall traps, tapping of francolins and the use of the musket were the innovative techniques of the Mughals. Babur, was a tribal warrior, who had spent most of his life in Afghanistan, so when he conquered Hindustan, this new terrain, offered great wonders and adventures. Babur's memoir, the Baburnama is replete with mention of the birds and beasts of the new country. He hunted the Indian one-horned rhinoceros and wild ass among other animals from horseback with regular gusto.[6] This tradition was carried on by Humayun, but he was not fortunate enough to enjoy the court pleasures, as he was driven out by the Afghan, Sher Shah and took refuge at the Court of the Shah of Persia. Akbar appears to have taken great pleasure in the hunt as is evident from the records. In a painting titled, 'Akbar Hunts with Trained Cheetahs', Akbar is seen enjoying the hunt. The incident is also recorded by Abul Fazl who calls it 'a joyful occurrence' that had taken place in 1572 in Sanganer. Akbar was leading the hunt

with his cheetah-i- khas or royal cheetah Chitr Najan and chasing a herd of blackbucks, one blackbuck leapt over a river of 25 yards and the cheetah followed and ran it down, giving Akbar great happiness.[7] It was the accepted norm in India that cheetahs were trained to only hunt black coloured buck.[8] They (cheetahs) were trapped and caught from the jungle. Their training usually lasted for three months. Jahangir recorded that Akbar kept no fewer than 1000 cheetahs (yuz) which however never mated.[9]

The favourite style of hunting of the Mughals was the 'qamargah' or enclosure which involved the use of a large army.[10] Abul Fazl notes that '…the equable mind of the Shahinshah felt a desire for hunting and the qamargah which is the most delightful form thereof. He used the arrow, the sword, the lance and the musket.' Akbar killed a tiger near the fort of Narwar in 1561 and the act is beautifully depicted in the picture entitled, 'Akbar Kills a Tigress Defending Her Offspring near the Fort of Narwar, 1561.'[11] Abul Fazl comments, '…His Majesty with swift foot and alert arm attacked the brute and killed it by one stroke of his sword.' Akbar also hunted wild asses in the desert as is evident from a painting of the same name.[12] Jahangir was also an avid lover of shikar. He ordered to count all the animals killed from his 12th regnal year to his 50th and the number was 28532 of which 17167 had been shot by Jahangir himself. It included 1672 antelope, deer and mountain goats, 889 nilgais, 86 lions, 64 rhinos, 13964 birds and 10 crocodiles. Jahangir also built a hunting palace, the Hiran Minar in Sheikhupura, near Lahore. A painting shows him showing his hunting skills to the Rajput prince Karan. The two are shown seated on restless elephants, a killed lion lying on the ground, the Rajput prince touching his turban as a mark of respect.[13] The image includes a Rajput prince because the hunt appealed to the Kshatriya ideals of this clan.

After the death of Akbar, the interest in large scale hunting like qamargah ceased and effortless methods evolved. The use of the cheetah continued. Bernier noted how the cheetah hunted down an animal from a herd.[14] It is known that Shah Jahan pressed peasants into service to corner a pride of lions in the Deccan. Dara Shikoh used decoy animals in hunting.[15] The Mughals used green clothes for hunting for effective camouflage. The low-caste hunters pursued hunting by using bows and arrows, knives and spears, laying traps and digging pitfalls. In spite of the passion for shikar and its pursuance by the royalty and their accomplices, as well as hunting by other subaltern classes, hunting did not result in any drastic depletion of wild animals so as to cause alarm during the Mughal period. There was still enough forest cover to sustain them. An English traveller and merchant, Edward Terry, wrote, 'The whole kingdom as it were a forrest, for a man can travel in no direction but see them, and except it be a small distance of the king, they may be every man's game.'[16]

THE ENGLISH ONSLAUGHT

The coming of the English changed all this. The tradition of venerating the forest in the form of Aranyani, the goddess of the forest, as the primary source of life and fertility was replaced by commercial economy of British colonialism.[17] They saw the forest in the perspective of its utility and its potential for commercial exploitation. But when they encountered Wild India they realized that this was a site which was completely different from the woodlands of the temperate world. What they

experienced both fascinated and appalled them. The vastness of the wilderness and the remarkable variety of wildlife was bewildering and there was also a dread and fear of the unknown, typical to the folklore of temperate zones where forests were regarded as places of danger.[18] Writes Fytte:

"*I would tell you of beasts that roam,*
A tale of fear and wonder;
The shrieking elephant lure has home,
Here wakes the tiger's thunder.
The lordly bison here retreats,
His choicest grass-hills leaving:
The shapely deer,'mid the summer heats,
Is seen his pathways cleaving.
The lovely peacock streams its note,
But scarce has the sound departed,
When bulbul tunes its fullest throat,
To heal the discord started."[19]

The poem draws a perfect picture of woodland India, an Edenic land but beset with danger, a mysterious site with incomprehensible facets. Hence, the sacred duty of the imperial power was to unravel the mystery of this land, as only by knowing and understanding it could one extend its power over this domain. So intervention was absolutely necessary. Moreover this site was chaotic and unruly and needed to be controlled and ordered and in this endeavour the casualty were the animals specially those that were perceived to be 'pests' and 'vermin'. The English assault on wild animals was unlike any that was experienced in India before. No other regime attempted to exterminate species but the English declared a war against 'dangerous beasts and poisonous snakes'. Bounties were given out in various provinces to eliminate errant species. Reward hunting was effectively used to eradicate those beasts that were perceived to disrupt 'order'. The destruction of life and property could not be tolerated so began the process of systematic annihilation. The more the deaths recorded on account of predatory animals the greater was the resolve to destroy the vermin and pests. The four charts given in the next pages amply prove the same. The threat to life and property from wild animals was as potent in the period 1913 to 1917 as it was in the earlier period between1876 to 1880, so the war continued the only exception being that some animals like the elephants were better alive than dead and this saved them from the carnage that other vermin were subjected to. The threat factor proved conducive to sport hunting as killing of animals in shikar expeditions could be easily justified on the grounds that the destruction of human life and property could not be tolerated. The charts given below testify to the same.

Table 1[20]

PROVINCE	Number of persons killed					Number of cattle killed					
	1876	1877	1878	1879	1880	1876	1877	1878	1879	1880	
Madras	981	885	852	1,336	1,405	10,322	7,255	6,350	6,455	8,894	
Bombay	1,048	1,019	911	1,014	1,108	3,428	3,172	3,957	4,110	4,626	
Bengal	9,989	10,135	11,318	10,779	11,359	11,932	10,329	11,444	12,046	15,815	
North-West Frontier Province	4,692	4,593	4,219	4,494	5,284	12,122	10,513	7,214	8,391	8,361	
Punjab	666	726	802	650	723	6,606	5,279	7,688	9,291	8,064	
Central Provinces	1,098	1,461	1,233	1,099	1,280	4,366	3,062	2,299	2,795	3,750	*Exclusive of Mysore figures
British Burma	114	203	183	206	181	825	1,223	589	842	1,172	
Mysore and Coorg	...	98	84	156	3*	...	5,508	4,280	6,001	219*	
Assam	483	417	488	421	445	2,541	3,303	2,053	2,493	3,326	
Hyderabad	165	126	154	130	149	2,220	3,621	2,684	3,196	3,943	
Ajmere and Merwara	37	32	12	27	53	468	232	143	291	216	
Total	19,273	19,695	20,256	20,312	21,990	54,830	53,197	48,701	55,911	58,386	

Table -2 [21]

PROVINCE	Total number of wild animals destroyed					Total number of snakes destroyed					Total amount of rewards given(b)				
	1876	1877	1878	1879	1880	1876	1877	1878	1879	1880	1876	1877	1878	1879	1880
											Rs.	Rs.	Rs.	Rs.	Rs.
Madras	6336	6997	7016	4008	1284	532	...	...	...	...	29884	18402	17854	16401	16579
Bombay	1019	1237	941	1875	1717	153090	93154	86796	102232	177078	11197	9249	7791	8105	11697
Bengal	4022	4138	4650	5543	4783	35585	15761	24276	21102	23201	26888	20304	23583	28371	28576
N.W.P. and Oudh	6382	3910	4495	3032	2924	816	414	1697	952	1029	13711	9578	10938	8176	7305
Punjab	2458	1489	1320	1503	1389	21285	13566	1783	2420	9126	6843	6689	4172	5395	5350
Central provinces	1801	1608	1197	1030	1408	30	61	410	924	866	18699	17359	14277	12569	18223
British Burma	461	761	657	694	639	658	2810	2214	4104	997	5102	4666	5100	3502	3470
Mysore and Coorg	...	1684	1200	179	(a)26	...	1336	691	1034	(a)58	...	3983	3541	4016	(a)140
Assam	800	772	815	640	541	325	135	25	33	202	10396	10640	10210	8385	7022
Hyderabad	187	238	173	124	167	...	...	...	88	158	1882	2110	1676	1043	1613
Ajmere and Merwara	13	17	23	13	8	50	58	66	72	61	9	34	44	19	13
TOTAL	23459	22851	22487	18641	14886	212371	127295	117958	132961	212776	124574	103017	99189	95985	99990

(a) Exclusive of Mysore figures

(b)The annas and pies have been omitted in these figures

Table-3[22]

Number of wild animals and snakes destroyed											
PROVINCE		BY WILD ANIMALS							Total no. of animals destroyed	Snakes
		Elephants	Tigers	Leopards	Bears	Wolves	Hyenas	other		
Madras	1913	...	83	714	54	...	...	1,357	2,238	...
	1914	...	79	711	43	...	...	1,074	1,907	...
	1915	...	75	635	85	...	...	973	1,768	...
	1916	...	65	677	84	...	...	808	1,684	...
	1917	...	69	621	82	...	...	1,126	1,898	...
Bombay	1913	...	36	242	6	186	47	2,954	3,471	27,336
	1914	...	47	231	10	126	43	3,540	3,997	27,751
	1915	...	54	219	8	161	29	3,347	3,818	22,042
	1916	...	42	188	3	114	50	3,971	4,368	9,982
	1917	...	55	172	48	41	108	3,523	3,947	25,035
Bengal	1913	6	180	466	37	19	6	2,144	2,858	17,134
	1914	1	205	489	48	15	18	2,098	2,824	10,215
	1915	2	275	496	37	23	5	1,931	2,769	11,893
	1916	...	110	202	2	1	...	483	798	1,171
	1917	...	123	171	7	3	23	85	412	1,205
United Provinces	1913	1	62	681	270	1,252	255	138	2,659	5,310
	1914	...	76	714	278	1,227	296	871	3,462	5,782
	1915	...	78	592	164	1,370	277	984	3,465	9,002
	1916	...	49	471	204	1,792	174	351	3,041	6,352
	1917	...	59	437	224	1,516	189	215	2,640	4,999
Punjab	1913	...	...	149	197	2,033	1	...	2,380	3,080
	1914	...	...	167	158	845	...	...	1,170	8,854
	1915	...	2	135	74	336	1	...	548	14,648
	1916	...	...	115	86	407	...	137	745	27,157
	1917	...	...	134	106	93	...	159	492	15,026

Number of wild animals and snakes destroyed

Burma	1913	39	455	2,588	1,562	...	...	667	5,311	16,222
	1914	33	506	2,399	1,760	...	...	319	5,017	44,299
	1915	21	532	2,828	1,712	...	...	1,259	6,352	34,757
	1916	30	536	2,737	1,537	...	...	985	5,825	11,905
	1917	58	484	2,974	1,520	...	...	837	5,873	16,398
Bihar and Orissa	1913	...	96	345	157	206	234	512	1,550	16,784
	1914	4	100	415	199	659	249	1,134	2,760	17,204
	1915	1	105	386	192	156	247	265	1,352	16,566
	1916	...	71	334	157	139	157	140	998	5,740
	1917	...	76	258	119	273	99	281	1,046	9,171
Central Provinces and Berar	1913	...	192	870	344	77	...	419	1,902	1,265
	1914	...	164	852	275	122	...	419	1,832	1,350
	1915	...	131	791	251	92	...	466	1,731	1,508
	1916	...	139	691	182	61	...	344	1,417	849
	1917	...	158	651	180	240	...	335	1,564	728
Assam	1913	4	256	523	295	3	10	897	1,988	1,981
	1914	9	285	558	305	5	2	1,447	2,611	2,168
	1915	9	327	533	253	...	3	1,935	3,060	2,952
	1916	5	373	555	460	4	1	164	1,562	1,409
	1917	5	248	580	498	...	1	158	1,490	332
North-West Frontier Province	1913	...	...	14	...	76	...	...	90	595
	1914	...	...	25	...	62	5	...	92	540
	1915	...	...	9	...	49	...	...	58	478
	1916	...	...	11	...	57	...	...	68	436
	1917	...	...	5	...	39	...	...	44	396

Table-4[23]

Amount of Reward(in rupees)paid for their destruction in each calendar year from 1913 to 1917

PROVINCE		REWARDS PAID FOR DESTRUCTION OF									GRAND TOTAL
		Elephants	Tigers	Leopards	Bears	Wolves	Hyenas	Others	Total	Snakes	
		R	R	R	R	R	R	R	R	R	R
Madras	1913	...	4956	14076	241	...	...	2558	21831	...	21838
	1914	...	4003	15247	234	...	...	1948	21477	...	21447
	1915	...	4262	13169	811	...	...	1722	19964	...	19964
	1916	...	3989	12218	638	...	...	1263	18108	...	18108
	1917	...	3527	11091	890	...	...	1706	17214	...	17214
Bombay	1913	...	509	2352	12	286	...	1925	5084	73	5157
	1914	...	798	2196	102	284	...	2772	6152	75	6227
	1915	...	801	2064	45	335	...	2024	5269	2187	7456
	1916	...	714	1920	30	267	...	2793	5724	102	5826
	1917	...	833	1278	40	60	25	868	2604	121	2725
Bengal	1913	250	15660	2109	25	...	10	998	19052	172	19224
	1914	100	14018	1650	10	15	26	1658	17477	157	17634
	1915	...	15205	1621	22	28	6	1096	17978	179	18157
	1916	...	4887	978	5	3	...	1356	7229	170	7399
	1917	...	13683	893	15	8	41	825	15465	207	15672
United Provinces	1913	...	800	5681	689	8250	452	1080	16952	26	16978
	1914	...	...	5662	693	8459	487	1355	16656	32	16688
	1915	...	...	4794	384	10860	484	1599	18121	34	18155
	1916	...	...	4010	756	10878	282	1710	17636	5	17641
	1917	...	...	3461	612	8354	269	895	13591	36	13627
Punjab	1913	...	...	1062	1441	5880	...	...	8383	387	8770
	1914	...	...	1162	959	2601	...	...	4722	1363	6085
	1915	...	30	982	502	1272	...	...	2786	2183	4969
	1916	...	...	751	591	1310	...	28	2680	3261	5941
	1917	...	...	917	735	433	...	21	2106	1855	3961

Number of Reward(in rupees)paid for their destruction in each calendar year from1913 to 1917

Burma	1913	100	16810	39951	13495	...	...	760	71116	1373	72489
	1914	200	18850	36975	15132	...	...	935	72092	5680	77772
	1915	...	19540	44084	15173	...	...	1277	80074	12641	92715
	1916	530	19250	43545	13392	...	...	1110	77827	...	77827
	1917	356	17390	45990	12933	...	...	870	76339	...	76339
Bihar and Orissa	1913	...	5572	1874	361	3477	460	92	11836	56	11892
	1914	...	2963	1760	341	9715	372	250	15401	92	15493
	1915	...	4087	1760	396	2615	372	87	9317	63	9380
	1916	...	2447	1530	384	575	277	44	5257	41	5298
	1917	...	3487	1145	245	820	158	66	5921	278	6199
Central Province and Berar	1913	...	2802	12220	2083	487	...	5538	23130	403	23533
	1914	...	2345	12477	1659	645	...	5823	22940	531	23480
	1915	...	1855	11072	1596	506	...	6232	21261	463	21724
	1916	...	1995	10081	1050	353	...	6224	19703	289	19992
	1917	...	2555	9535	1025	894	...	4309	18318	301	18619
Assam	1913	69	4528	4280	1135	10	7	555	10584	122	10706
	1914	100	5385	4703	1058	47	5	7000	11998	71	12069
	1915	275	6788	4520	1078	...	...	959	13620	212	13832
	1916	275	8012	4805	2068	10	1	802	15973	202	16175
	1917	350	5463	4740	2005	...	2	728	13288	131	13419
North-West Frontier Province	1913	...	...	92	...	352	...	...	444	91	535
	1914	...	...	38	...	249	...	...	287	106	393
	1915	...	...	62	...	242	...	...	304	92	396
	1916	...	...	68	...	275	...	...	343	91	434
	1917	...	...	40	...	193	...	...	233	125	358

Amount of Reward(in rupees)paid for their destrution in each calendar year from 1913 to 1917

Coorg	1913	...	640	985	...	...	...	210	1835	1	1836
	1914	...	950	890	...	...	...	20	1860	...	1860
	1915	...	350	780	...	...	...	90	1220	...	1220
	1916	...	605	708	...	...	...	110	1423	...	1428
	1917	100	1115	540	...	...	...	52	1807	...	1807
Delhi	1913	...	...	...	...	15	...	...	15	...	15
	1914	...	...	...	...	10	...	...	10	...	10
	1915	...	...	...	...	15	...	...	15	...	15
	1916	...	...	...	...	11	...	...	11	...	11
	1917	...	...	24	...	5	...	...	29	...	29
Ajmer-Merwara	1913	...	...	15	...	12	18	...	45	2	47
	1914	...	...	30	...	3	12	55	100	3	103
	1915	...	...	5	...	3	21	140	169	8	177
	1916	...	...	5	...	3	12	40	60	3	63
	1917	...	...	15	...	3	12	...	30	5	35
Bangalore	1913	...	...	...	...	...	...	...	...	96	96
	1914	...	...	...	...	...	...	...	...	124	124
	1915	...	...	...	...	...	...	...	...	152	152
	1916	...	...	...	...	...	...	...	...	155	155
	1917	...	...	...	...	...	...	...	...	164	164
Total	1913	419	52277	84697	19482	18769	947	13716	190307	2802	193109
	1914	400	49312	82790	20238	22028	902	15511	191181	8234	199415
	1915	275	52918	84913	20007	15876	883	15226	190098	18214	208312
	1916	805	41899	80619	18914	13685	572	15480	171974	4319	176293
	1917	806	47353	78669	18500	10770	507	10340	166945	3223	170168

The jungles teeming with wildlife was also the perfect getaway from the grind of the work-place. India was never the first choice of posting for the sahibs. This was a land of extreme heat and humidity, of disease and death and was miles away from home. But the opportunity this land provided to the aficionados of extreme sports like shikar was almost unparalleled. Hunting or shikar was pursued as a leisure activity. Leisure and recreation acquired a new meaning in industrial Europe. The upper classes cultivated leisure activities and even the ordinary people got more free time to pursue recreational activities. Leisure became a part and parcel of social institutions, social relations and socio-political discourses and regimes.[24] Shikar was passionately pursued by the English as a much loved form of recreation and their obsession with it is amply revealed in the diaries, memoirs, travelogues etc. left behind by them. Comments Col. Richard Burton:

"*Not much to do (in the military station) with plenty of leisure for shikar. Weekend during the cold weather was frequently spent out of the station. Those chilly, starlit rides gave an exhilarating and adventurous feeling.*"[25]

Even though the country was perceived as '*The Land of Regrets,*' by many Englishmen, they were however forced to concede that from '*the shooting point of view, it is a Paradise*'.[26] The same sentiment is echoed by Lt. Gen. Robert Baden Powell:

"*India as a country has its attractions for every kind of visitor, but I am sure that the point which appeals to every young Briton who goes there is the sport which can be obtained in so many different branches. There are big game and wild fowl shooting…*"[27]

The jungles had an irrepressible lure; its savageness both real and imaginary had a raw appeal that compelled the uninitiated English sahibs and memsahibs to savour its unique flavour. Writes Emma Roberts:

"*For a short period, a sojourn amidst the untamed wilderness of Hindostan is very desirable, all persons visiting India must have more or less experience of the savage life in their passage through those un-reclaimed tracts which continually occur during a long march….in constant movements through wilds, however monotonous, the incidents of the march and the change of scene afford a salutary relief to the ennui, which is not to be found in fixed residence.*"[28]

The British civil, military and forest officials indulged in various forms of hunting as it was a standard means of recreation for them. In the military almost everyone from high-ranking officers to white troopers participated in some form of the hunt or other. It helped them to remain war-worthy in times of peace and also helped the colonial agenda of constructing a virile and manly image of the 'self'. The civil officers took short leaves to pursue the sport. The officers went on shikar not only for recreation but also to acquaint themselves with their districts and its people. In many parts of India they developed a patriarchal approach to hunting. Richard Burton, a colonel played saviour to villagers threatened by a tiger at Mudkhol in the Deccan. He states:

"*An official of the railway staff saw the tiger and send news to me, adding that the villagers were loud in their complaints against the beast.*" He sat on a tree and the tiger was brought out of its hiding place by the beaters and Burton killed it with his .005 Express rifle much to the joy and relief of the villagers.[29] Here was the patriarch always ready to protect the 'helpless' natives from the

clutches of an evil beast. The European forest officers had the best opportunities of hunting and regarded it almost as a professional requirement.

The British in India adopted and fused two hunting traditions – the grand and opulent hunting practices of the Mughals and their successor states as well as the humble methods of the low-caste Indian hunters. "*Even Anglo- Indians are sometimes compelled to adopt native arts and when the assistance of elephants cannot be procured, they will condescend to lay bait for a tiger, and sit patiently in a tree until the fierce animal shall repair to his evening repast, and they can shoot him while in fancied security, he is indulging his appetite.*"[30] But this was not much fancied as it was '*unwarlike*'[31] something antithetical to the machismo of the Englishman. The weapons they used ranged from spear and knife to fire-arms, culminating in the high velocity cordite rifle at the end of the 19th century. They also participated in various forms of shikar to stalk and hunt wild animals. The 'howdah' shikar borrowed from the Mughals involved the least risks but it was expensive and meant only for the glitterati and high ranking officials. Reginald Gilbert alludes to the advantage of howdah shikar:

"*I know nothing grander than following up a wounded tiger on a good staunch elephant. From a position of perfect safety you are able to hold all the grandeur of the charge of an infuriated tiger, and to have all the fun of the sport without the danger of it, or, to quote the immortal Mr. Jorrocks, 'all the spirit of war with only five per cent. of its dangers.' To those, therefore, who can obtain an elephant, I say never follow up a wounded beast without getting into a howdah.*"[32]

This form of shikar could be best used to project the difference between the 'self' and the native 'other'. The pomp and grandeur of the exercise, the army of natives that accompanied the entourage, bedecked elephants and setting up of elaborate camps inspired awe among the natives, perhaps it was meant to do so, to drive home the message that the exhibition of opulence could only be the prerogative of a superior or the master. It was a mechanism to overawe the onlookers and a covert ploy to establish supremacy.

Another form of shikar was hunting from a *machan* i.e. a platform on a tree top or a perch on a tree. But this form of sport was risky and meant only for the seasoned shikari. It involved braving the unpredictable days or nights of the jungles and waiting for the kill by using decoy animals and the services of native beaters, who would raise such a din that tigers or other big game would be forced out of their hideouts into the open. The sahib armed with a gun would then do the needful i.e. shoot the animal, much to the exuberance of the natives. Recounts Col. Burton:

"*An hour passed, then I heard a shot fired by the head shikari as a signal for the beat to begin. A renewal of shouts and rattling of sticks set everything in the forest on the move; first to appear were the peafowl and the jungle fowl… several jackals came slinking by… small birds fluttered from trees… Soon the form of the tiger is viewed through the vista of bamboos and tree trunks… He looks huge; his ruff stands out white on either side of his neck. The placing of the first shot is everything. With a grunt the great brute bounced forward, but then comes the welcome call from Abdul, 'Girgaya, margaya'- He is fallen he is dead."*[33]

Stalking animals was also common, done mostly in the sub-montane forests of North West Frontier Province, in the Himalayas of outer Kumaon, in the spurs of the Kaimur and Vindhya ranges,

and in Sivalik hills, east of the Ganges. The sahibs did not hesitate to negotiate very difficult terrain in pursuit of quarry. They would be led by native shikaris who being locals had a good knowledge of the locality and also had *khabbar* about game. States A.M.Markham(I.C.S.) :

"*My camp was on the right bank of the Ken in the Banda District, of which I was then the Collector. Under the guidance of the local shikari, I crossed the river on a lovely morning in February. It was a lovely little bit of sporting country. On the sand on the edge of the river were the fresh track of a leopard and a hyaena and innumerable spoor of deer. As I went forward among the low bush near the bankI put up numbers of peafowl and the painted spur fowl, which were allowed to go their ways, though they offered tempting shots. I had not gone a quarter of a mile, and the sun had not risen, before I spied a splendid old sambhar silhouetted against the sky on a rocky point on one of the nearer hills. I waited while he and his harem of three hinds moved round the point, and fired at him (but missed). I was afraid that my precipitancy had lost him, but he seemed so grand a quarry that I determined to follow him. It was a most arduous stalk; the hills were very steep, and the rocks, sharp ledges, creepers and undergrowth made advance very difficult and slow."*[34]

The most warlike of all shikar was to encounter a tiger singly on horseback.

"*This is of course a very difficult and dangerous enterprise; few steeds, however noble, can be brought to face an enemy of which they entertain an instinctive dread. The vicinity of a tiger is often discovered by the distress and terror exhibited by horses…., and when a horse is found sufficiently courageous to encounter so terrible a savage, the most extraordinary activity, coolness, presence of mind, accuracy of eye, a strength of arm, are necessary to ensure victory. The hunter, after putting up the tiger, wheels round him in a circle at full speed, never permitting in the rapidity of his movements, a single moment for the fatal spring and when the tiger bewildered and dazzled offers an unguarded front, pins him to earth with the thrust of a spear. Such enterprises must be of rare occurrence, and can only be contemplated by adventurous spirits, delighting in the excitement produced by the wild and dangerous sports of India…"*[35]

Native methods of using nets and spears were also adopted and the indigenous sport of falconary also pursued. The *shaheen* falcons were trained in the art of catching quarry and this sport offered great pleasure and excitement. Comments C.H. Donald:

"*A cold crisp morning in February, a team of falcons and a good trusty horse beneath you, and what could man want more to make his enjoyment complete and a holiday something to be remembered in after years. (The falcons) would be putting in stoop after stoop as they got above their quarry."*[36]

The whole exercise of falcons stooping repeatedly to catch quarry, the attacked bird trying its best to escape the talons of the peregrines, the shouts and yells of the falconers and shrieks of local boys all added to the excitement. It was indeed a Sport of the Kings.

When the English came to this country her jungles pulsated with wildlife:

"*One day I was out from dawn to dark and came home along the valley of the clear stream. One sees so much bird and animal life: large yellow and black squirrels are plentiful; lungoors and monkeys everywhere; green pigeons, jungle-fowl, red spur fowl and peafowl in great numbers. On one sand bank I saw the tracks of all game animals of these parts; tiger, panther, bear, buffalo, bison,*

swamp deer, sambur, chital, four- horned antelope; also hyena and pig and all small animals as otters, cats and mongoose… and there were also crocodile sunning themselves near the water's edge."[37]

The wilderness was a shikari's paradise. The immense scope for shikar was one of the baits used to lure reluctant military and civil officers to this land of heat and dust, pests and diseases. The officials were always looking for opportunities to participate in this adventure sports. A.I.R. Glasfurd reminisces thus:

"*Many the jolly day spent on the plains of Central Provinces and in its jungly hills and its comfortable old fashioned mess, the walls of which bear silent testimony to the sport it has afforded to more than one generation of sportsmen.*

Tigers, panthers and leopards, bears, bison many a fine sambar - among which may be recounted trophies magnificent- beside nilgae, barking deer, four horned antelope etc. and in the open country cinkara and buck in great numbers. Also some pig-sticking and some small game shooting, the best day to any recollection, being a yield of a hundred head, including seventy hares."[38]

The vast, verdant and virgin wilderness was not only a site which offered opportunities for shikar but the exercise also offered certain other benefits i.e. the sights and the sounds of the jungles which exhilarated the senses no less than did shikar. The jungle mesmerized the sahibs. Sir M.G. Gerard leaves behind a beautiful account of his experiences in the jungles of India. He states:

"*… another excellent jungle for shooting of every description is the Bunjar Valley reserve…Here you are at the heart of beautiful forests of sal trees, with game of every kind and all around you. In front of the tent on every side by trees, lies a small undulating grassy plain, through which the swamp deer love to roam every morning and evening. On the outskirts of the plain you may catch a glimpse of the beautiful spotted deer, or cheetal. The denser part of the forest is the favourite haunts of the rugged-horned veteran sambhar.*

The nights are no less perfect than the days. The hoot of the owl, the sharp cry of the cheetal, the occasional bark of the wild dog pack chasing some poor sambhar to his death and the weird 'conk' of the tiger stealthily patrolling the jungle tracts in search of dinner, all sound at your very tent door, as you lie awake listening to the voices of nature." [39]

Wild animals were hunted with impunity with the motive to 'civilize' a wild landscape and with the objective to remove all impediments to settled agriculture, this is evident from the fact that the animals which were perceived as 'pests' were those from which the challenge to peaceful settled life was the greatest. Tigers, snakes, elephants, pigs and even birds like sparrows and parrots were specially sought to be exterminated as they threatened life or crops. To a people obsessed with the sanctity of order no chaos could be tolerated. The Hunt or shikar acquires a new dimension when seen from this perspective; it was not only an act of leisure but perhaps also an activity integral to extending the tentacles of imperialism. The wild landscape was the last 'frontier' that needed to be penetrated and conquered and killing obnoxious beasts that roamed this site was imperative to achieve this. In fact it was reward hunting which played a pivotal role in the rapid depletion of wild animals. The above mentioned Tables (1-4) testify that even in the late nineteenth and early twentieth

century vermin eradication continued unabated, even though one finds a growing concern for diminishing species.

The three animals with which the English had a special relationship were the tiger, the elephant and the pig. The tiger evoked contradictory responses. It was a magnificent beast that inspired awe but it was also dreaded. It possessed a compelling fascination, inspiring a great range of both negative and positive responses. From the earliest years of British rule its danger had been apparent. Travellers' accounts and memoirs abound in tales of European deaths when tigers seized peoples on journeys, on picnics, or out hunting, as many graves in European cemeteries testify. The most famous such incident was the death of the son of Sir Hector Munro on Saugor Island, near Calcutta, in 1792. Blake's, *'Tiger! Tiger! Burning bright in the forests of the night',* with its repeated use of the word 'dread', was known to most nineteenth century school children.

The primary objective of a shikar expedition was to get a tiger. E.Gouldsbury of the Indian Police Force (1850-96):

"*This may seem incredible, for it must be borne in mind that a tiger, seen for the first time at large in its own jungles, is a sight few sportsmen…can look on without experiencing a feeling of intense excitement, coupled with an almost uncontrollable desire to possess its head and skin…it is (an) insatiable longing…*" [40]

News of the appearance of a man eater had a powerful impact on any district. Stories developed into myths and legends of startling proportions. Superstitions were rife among Indians and Europeans alike, and the man eating tiger was the brute which attracted greatest attention. "*All the tigers of this Jeypore country are potential man-eaters and readily take a man if they meet him after dark,*" opined Col. Richard Burton.[41] Often man eaters were created if not found, this helped in legitimizing their annihilation on the one hand and on the other helped to magnify the achievements of the sahibs, as killing a dreaded beast surely needed great courage and grit. It also helped the colonial endeavour to project themselves as the 'protector'. The hunting books starting with T. Williamson's *Oriental Field Sports,* are full of stories of beasts with over a hundred human victims to their credit, some of which were never destroyed, while others inspired startling deeds of avenging heroism on the part of the bereaved relatives.[42] Whereas in the past, threatened villagers would have turned to the professional shikari with his muzzle-loader, traps or spring poisoned arrows, they increasingly looked to the British official for protection and the latter were ever-ready to help as that suited their purpose. Every ICS man, army officer or policeman was executed to be a tiger-slayer (though in reality many, of course, spent their entire career in India without ever encountering a tiger) In many parts of India they developed a patriarchal approach to hunting. This protective function was even more significant in the case of the tigers that took to killing domestic stock. Percy Wyndham, Collector of Mirzapur in U.P. (1905-15), a first rate shikar district was called the 'Bagmaroo sahib' as he killed quite a few tigers in the district. 'Wyldham sahib' was always ready with his gun when the villagers complained to him about a tiger harassing them or playing havoc with their cattle in their village.[43]This protection service was normally performed from the machan over tethered live bait (goat or young buffalo, usually) or the tiger's recent kill, even if it were human remains (though the relatives often protested). The more intrepid tiger hunters shot on foot, having the tigers beaten to them by the massed forces of

the local villagers known as *hunqahs.* It was alleged that great celebrations could break out after the killing of a man-eater, and thousands of villagers would congregate to exult over the carcass. The noblest of the shikaris would divide the reward among his followers though the rewards doled out were often very measly. Here too the 'self' and 'other' divide was very pronounced, as here was the superior giving *bakshis* to the subordinates.

Tiger shikar for sport rather than protection was normally conducted from elephant-back, again with the aid of a large army of beaters but this was pursued by the most senior officials, and women could participate either as spectators or as shots. In its easiest form, as undertaken, for example, by forestry officers, the hunters would ride on the back of the 'pad' elephant, the riders sat on the pad – an arrangement of heavy materials like a flexible mattress over the elephant's back – and the elephant often moved in search of the quarry. Deer, antelope and buffalo were often shot in this way, too, since the animals were usually unaware of the humans on the elephant's back. The 'state' version saw the hunters seated in howdahs on backs of elephants, and the tigers were always driven towards them. There were rules about the order in which the guns on a line of elephants were permitted to fire, about the positioning of the elephants according to the status of the occupants, and the right of the 'first shot' to acquire the skin. Each viceroy had to indulge in the obligatory tiger shoot and often secured 'record' tigers because the method of measuring them was more favourable in the case of the viceroy.[44]

The sahibs took great care to click photographs with their kill. The way they posed with the hunted animal; gun in hand, one leg on the carcass, the pride of having overcome a formidable challenge writ all over the faces testify to the fact that they wanted to prove to the onlookers their masculine prowess and invincibility; though very often the job of finding the animal or even killing it was accomplished by the native shikaris. The whole exercise of measuring the animal after it was felled by bullets and revelling in having secured a huge beast was also done with the same goal in mind; to show how courageous and powerful they were that they threw all caution to the wind and over-powered a monstrous brute.

The elephant was hunted for only a few decades of the nineteenth century, then its usefulness was discerned; it proved to be indispensable in plantations, for timber hauling and for use in the army and this saved it, only those elephants which were declared to be 'rogues' could be killed. With the imposition of the Elephant Preservation Acts of 1873 and 1879 strict controls on the elephant was enforced. Elephants were caught in *kheddahs*. A *kheddah* was a large enclosure surrounded by a ditch and a paling of timbers, with a long funnel leading to its entrance. The drive itself could last several days and, according to Williamson, often involved 6,000-8000, persons using firearms, drums, trumpets and fireworks to force the herd towards the *kheddah*.[45] The ditch was then filled up by means of billets of wood being thrown in, and as the animal rose near the surface of the ground, the two ropes fastening him were pulled tighter around the trees. Eventually he got out of the pit somewhat fatigued; the ropes which secured him were fastened to two tame elephants and the animals were marched in single file to the kraal and all the ropes were removed. He was watered three times a day and soon made tame by kindness, given sugarcane, etc. The work of capturing elephants was an exceedingly interesting one, and only needed care and constant supervision to

render it successful; and certainly the more one had to do with these animals the more one was bound to recognise what intelligent useful beasts they were.[46] Catching elephants in *kheddahs* was a specialized activity and required a lot of skills, it may not have been as fascinating as hunting tigers but it had an appeal of its own. States Isabel Savory,

'*I had always been anxious to see an elephant khedder and when we were in Madras some of our party were able to avail themselves of an opportunity which afforded itself. One of the most exciting scenes witnessed (by me) – was the entrapping of these wild monarchs of the jungle.*'[47]

Pig-sticking and hog hunting was an extension of the wild boar chase pursued in England. The sport was one of the most loved by the English as it offered great oppurtunities for adventure and unbridled excitement. Major Henry Shakespear described hog-hunting as the best sport in the world, particularly in the hilly regions of the Deccan and Nagpur.[48] He seems to have participated in the sport from his arrival in India in 1834. By the 1850s three types of pig-sticking had emerged, in Bengal, the Deccan, and the Bombay Presidency. In Bengal a short spear, not more than 7 ft long was used, not as a lance but in such a way, that a charging boar ran against it. The Bombay pig-sticker operating in the area of Poona and Ahmednagar used a longer and lighter spear from 8 ft to 9 ft long, while in the Deccan a middling sized spear of 9 ft was the norm. Each spear was supposedly appropriate to the terrain. At a later date the United Provinces became celebrated pig-sticking country and Meerut one of its important centres. For Shakespear, the hog was 'the most courageous animal in the jungle' and its pursuit offered the opportunity for Europeans and 'native officers' to come together.[49] At least this was the case till the Revolt of 1857, in the post 1857 period Indian participation was restricted to doing menial jobs or acting as beaters to facilitate the sporting activities of the white masters. Isabel Savory relates one of her experiences which is an explicit account of the game and a wonderful testimony to the challenges faced in hog hunting and the sheer joy of overpowering that challenge.

'*It was a lengthy minute before S, leaning forward in his saddle called out "Ride". Everyting was forgotten but the maddening, all engrossing present: the wind in the horses' faces; the rattle of their hoofs; and eyes only for one grey object fast disappearing. It was indeed Ride.*

Over the valley, over the level,
Through the thick jungle, ride like the –
Hark forward! A boar! Away we go!
Sit down a ride straight! – tally ho!
He's a true bred one – none of your jinking;
Straight across country – no time for thinking.
There's water in front! – There's a boar as WELL;
Harden your heart, and ride pell-mell.'[50]

Overcoming the toughest of obstacles fitted in with the colonial agenda of proving the invincibility of the self. It gave yet another opportunity to show the Englishmen's superiority and manly prowess and in a way legitimized their right to command and control. The Prince of Wales gave the sport royal respectability in 1875. Beaters and elephants had to be withdrawn from elephant catching operations in Bengal to assist in the flushing of pig coverts for him.[51] The notion that pig-sticking was valuable

to the peasant population in keeping down crop destroyers was somewhat subverted by the development of preservation policies. The pig had made the same transition as the fox in England, from vermin to protected species for sport. Coverts were preserved in the Central Provinces, and action was taken to discourage poaching by 'professional hunters of the criminal tribes'. Therefore the transition to 'criminals' from being sons of the soil who had the first rights to resources helps to clearly reveal the real character of colonialism; service to self. To prevent poaching, the author of one shikar guide suggested, the Deputy Commissioner or District Superintendent of Police should be asked for help. A special shikari could also be retained to watch the coverts. In the Wardah district of Nagpur, excellent pig country, it was necessary to send a shikar into the area two or three weeks before it was intended to hunt in order to mark down and protect the quarry, for:

Of late years the cultivators have devoted a good deal of attention to the destruction of pig, in order to protect their crops, and a good many of the wandering tribe of Pardhis, who are noted pig killers, have been employed for the purpose. It is useless going down to the Wardha country and endeavouring to hunt places which have been visited at all recently by the Pardhis.[52] In this period pig-sticking was organised into Hunts or Tent clubs. The Nagpur Hunt, for example, was founded in 1863.[53] It had two cups, one presented by Colonel MacMaster in 1869, the other subscribed by members in 1893, to be awarded to the member who obtained the largest number of 'first spears' (i.e. the first, but not necessary fatal, spear driven into the pig) in the course of the year. Tent clubs were also founded at Saugor, Delhi, Agra and Meerut and many other places. Meerut became the centre of the sport, where General Wardrop, one of its authorities, officiated as secretary. The Hunt and Tent clubs lay down the rules, and, in contrast to the free arrangements of the first half of the century, no one could hunt in their areas without the permission of the captain or secretary. By 1911 and 1912 they were recording bags of 257 and 385 boar respectively. Muttra(Mathura) returned a record bag of 400 in 1911, and the sport seems to have been pursued with greater assiduity than at any other time.

The English love affair with hunting was not confined to these three animals. All animals, birds and even reptiles which were either perceived to disrupt order or whose novelty or exoticness attracted the sahibs were sought to be killed. The cheetah was an animal which was largely harmless but not being a very prestigious sporting trophy was condemned as a vermin and was extensively hunted. It was this indiscriminate slaughter that made the cheetah's sprint a thing of the past. The Indian lion preyed on livestock and was a threat to human life and property and hence was sought to be exterminated, the roar of the lion stopped, the animal came to be confined to a small pocket of western India alone. Bison, leopards, rhinos, bears, wolves, foxes, dhols or wild dogs, deer, ghorals, makhors, birds, snakes, crocodiles, everything was quarry. The innumerable fresh water tanks, lakes, *khals, bils, baors* and rivers and streams, all afforded excellent opportunities for angling.

"*My first introduction to the Indian Bison was in the pages of "The Old Forest Ranger," when I was a very small boy. My youthful imagination was so excited by the account of the bull, who is there described as coming on at headlong speed, his tail on end, his bloodshot eye rolling in the frenzy of madness, his tongue lolling far out of his mouth, and the white foam flying from his distended jaws, that I there and then was determined that when I grow up I should do little else than shoot bison….I have spent several hot weather vacations in pursuit of that animal….*"[54]

The bison excited not only the 'youthful imagination' of the child but it was equally sought after by shikaris for their regal horns which had a great trophy value, as well as for the gastronomic delight it offered. "*Cold bison tongue is juicy and good…,*"observes Inverarity.[55]

The panther or leopard was found almost through the length and breadth of India but in the sahib's perception it was a '*ruthless and wanton slayer*" and '*indomitable antagonist*'[56] so killing it was legitimate. The Indian rhinoceros too was a prized quarry but difficult to hunt. '*To hunt it most elaborate arrangements have to be made and no one but a millioner could afford to organize an expedition without assistance. Inhabiting as it does, immense expanses of giant grasses and reeds, it is generally impossible to obtain a view of it much less to shoot it, except from the back of an elephant. Their numbers have been terribly reduced; but there are enough left to be pretty sure of obtaining one or two species…*" observes General A.A.A. Kinloch.[57] The rhino was valued as a trophy animal and also had a number of other uses. "*I advise anyone who shoots a rhino to preserve the head, feet and whole of the hide. Most interesting trophies and a variety of useful articles such as tables, cigar boxes, lamp, pedestals, trays etc. may be made from them.*"[58] Sloth bears were considered a danger by the local people as woodcutters and other jungle frequenters were mauled by them but they were not adjudged as 'harmful' by the sahibs. "*I think this (mauling people) is rather to their being stupid, heavy sleepers, than to malice propense…*"[59] However the fact that they were feared by the natives induced the white shikari to kill them; here he was playing the role of a 'protector' to perfection! The wild dog or dhol was 'wicked' and destructive, hence killing it was justified. "*Recently a pack of wild dogs attacked a herd of cattle here, devoured four calves and half killed a cow. These cases prove the increasing boldness of these dogs.*"[60] Exotic animals like the Nilgiri tahr and the Himalayan ghoral were also much sought after sport. Stalking them was extremely exciting as both these animals were very difficult to spot and generally lived in treacherous terrain, killing them gave a lot of satisfaction and these animals had great trophy value as well. Mounted on the walls of the living rooms 'back home' would take the sahibs back to the good old days spent in the hills and mountains of India. The ibex was another animal that was worth courting hardships for. Its regal head with upstanding horns was a coveted trophy.

The variety of deer that the country possessed was also remarkable. The cinkaras, nilgae, sambhars, cheetal, barking deer, hog deer, four-horned antelope offered magnificent trophies and were hunted with great vigour they also were a nuisance to crops and therefore needed to be exterminated. "*Blackbuck, nylgae and cinkara harry crops,*"[61] Sambhar stalking was a very popular sport and the size of its horns was a much talked about subject, the longer the horns, the more prized was the kill. Black bucks were also valued for their horns as were antelopes. The woodlands of India were so well stocked with game animals, that even hastily organized expeditions didn't disappoint the shikari. Comments Lt. Col. C.H. Stockley:

"*After sunrise I left the bunglow and rode off into the jungle with three coolies in attendance…Early on it was evident that my lucky star was in the ascendant, for we had not gone half a mile when a cinkara buck trotted out of the bushes less than 200 yards on the right of the track and stood to gaze. I jumped off my pony and he turned to go just too late, for my bullet caught him behind the last rib….I got within 150 yardsof them (black buck) witout much difficulty. There were*

two good bucks among them, one of whom was standing broadside on. He collapsed to the shot, while the other, who had been lying down a few yards from him, jumped up only to fall….We got into a broad belt of cultivation; a herd of over 40 antelope were feeding….nearing a rocky hill I spied half a dozen nylgae accompanied by an immense blue bull…I was so astonished that I almost let the stag go, but firing just as he was disappearing, knocked him clean off his legs into a bush…."[62]

Venomous snakes were despised for they caused harm to life and the scourge was sought to be wiped out. Just as in the case of other dangerous beasts and errant species a veritable war ensued and the help of native shikaris was taken to eliminate snakes.

Birds constituted a valuable asset because of their plumage and were also favoured for their meat. The shooting of birds was taken up with great enthusiasm. Comments a member of B.N.H.S. :

"*…The black-tailed Godwit is common in the cold weather; its ally the Avoset Sandpiper, rather rare. The Stints are numerous, small as they are; they are well worth powder and shot, being for the table, barely inferior even to snipes. Totanus calidris, in a few places occurs in immense flocks. On one occasion, finding out their path to bed, I shot in a few minutes enough to supply a large camp and might have killed many more.*" [63]

Some birds like the parrots and sparrows were considered destructive to agriculture and sought to be exterminated. The enormity in the trade for plumage can be discerned from the following:

"*In March 1908, six cases described as containing "cow hair" were shipped from India, and were found on their arrival in London to consist of the skins of 6,400 green paraquets. So lucrative was the trade that single districts, such as Lucknow in the United Provinces, and Amritsar in yhe Punjab, contributed between them nearly 16000lbs. of plumage annually.*"[64]

The senseless destruction resulted in alarming depletion of species at times amounting to virtual extermination of '*Impeyan and Argus pheasants throughout the Himalayas, of Peacocks and Black Patridges from Bombay, of Egrets from Sind and Burma, and of a host of others, including Jungle-cocks, Paddy-birds, Kingfishers, Jays and Orioles throughout India generally.*"[65]Shooting of birds was normally indulged in by the sportsmen but snares were used in areas which were not frequented by sports men and others and female birds were snared wholesale, resulting in irreparable loss of bird species.

Angling was a favourite pass-time and the rivers, streams, lakes and other water bodies were teeming with a wide variety of fish. Even alligators were sought to be shot though by their own confession they were '*not of much use when you have got them*' because '*the bleached skull makes a ghastly trophy, and the skin is a very ugly one…*'[66]

THE MEMSAHIB'S TRYST WITH THE 'EMPIRE OF NATURE'

The Memsahibs' perception of the country was most often not guided by the imperial compulsions of their men folk. The female gaze differed from the male gaze. The women came to India chiefly as companions of their husbands, fathers, brothers or other male kinsmen. 'The right sort of women'[67] were always accompanied by men but many envisioned India differently and many

of them also broke conventions, in an era where, the opiniated European women was gradually emerging as is evident from the writing of Isabel Savory. She writes:

"*Of course there are women and women, but in the present day when so many of them care for a free life, I wonder that the majority of those should still have a conventional one.*" [68]

Constance Gordon Cumming is exuberant at breaking conventions when she travels in this country:

"*We had by this time thoroughly enamoured of our gipsy life and, were daily more and more enchanted with its freedom. The escape from every phase of civilised formality, from all fixed laws of action, from regular hours, but a merry supper by our camp-fire whenever we were ready for it; and then 'early to bed and early to rise'- in short, it was an escape from the old stereotyped existence whose comfortable, commonplace round we had run, till it had become altogether monotonous and humdrum…*" [69]

In fact this break with conventions was best revealed when women began to poach on a male preserve, hunting, a word suffused with the myths of masculinity. John Mackenzie has pointed to the 'sexual sublimation of the hunt', the tensions induced in the great risk and ecstasy of release when the hunter prevails and stands over the kill.' [70] One of the first women to participate in hunting and go on hunting trips was Emma Roberts in as early as the 1830's but she reveals that serious sports was restricted to men alone:

"*To ladies, hog hunting is of course quite out of the question, and there are few whose nerves could stand against tigers, to say nothing of the fatigue to be encountered in a chase which frequently lasts for hours under the burning sun*". [71]

In the nineteenth century women were always accompanied by men on hunting trips. The feminine propensity of women shikaris is revealed in Fanny Eden's comment:

"*The gentlemen have with them six rifles in their howdahs and shoot all the innocent wild beasts they meet. Just as I was disserting the exceeding beauty of one rose bush, a great wild hog rushed out of it and charged the elephant Mrs. C and I were upon… I settled that I had no taste for the shooting part of the expedition, and shall confine my ideas to picturesque, and there is more than enough to spare of it here. I thought that the hog's was a shocking case of murder…*" [72]

Women hunters had to contend with disapproval well into the twentieth century, as exemplified in Queen Victoria's dictum that only 'fast women shot' and in the following statement by Lord Warwick, "*I have met ladies who shoot and I have come to the conclusion, being no longer young and a staunch conservative, I would prefer them not to*". [73] But the dictums and disapprovals notwithstanding more and more women joined the ranks of big-game hunters at the turn of the century. Mrs. R.H. Tyacke came up with a sporting account entitled, '*How I shot my Bears*' in 1893. Isabel Savory waxes eloquent about freedom and escape from conventionalities hunting implies, as in the following passage:

"*There is no feeling like it! To be in the oldest of your old clothes, to feel your going out of the reach of letters, telegrams, and the faces of the civilized world; free to go and to do exactly as the spirit of the moment moves you; only to yourself to answer to; time is of no object; you may wait or hurry, eat where you like sleep where you like. It is the only life*". [74]

The excitement and adventure associated with the hunt, the adrenaline rush, the love of shikar, was increasingly being embraced by the white woman at the turn of the century. Pig-sticking, tiger shooting and other big game hunting were very masculine sports, involving great risks, courage and fortitude but barriers were being broken by the memsahibs in this country. *India,* opines Isabel Savory is a, *Paradise for shooting*. [75] Pig-sticking or hog-hunting exclusive male bastions were slowly being invaded by European women. Comments Isabel Savory:

"*Pig-sticking is always wildly exciting, no one realises who is near, or what may be in front; it is a case of riding as never before one has ridden; and the excitement of a break-neck gallop only gives place at a finish to a battle royal, fraught with danger*." [76] The euphoria at overpowering and subjugating a powerful rival was felt by women who so long were thought to be meek and unable to withstand violence and bloodshed. Savory was overwhelmed by the grit and defiant attitude of a wild boar in woodland India. She comments:

"*I have never seen such magnificent pluck or such implacable defiance in any animal;… speared twice again, at last he fell and died, "the bravest of the brave": humans would do well if they could play the game of life so nobly and meet death so callously*." [77]

However she goes on the defensive almost instantaneously and tries to justify her attitude. We notice in her the anguish of having broken convention and then again defiance and an almost desperate attempt to justify her thoughts and actions. She personifies the predicament of the late nineteenth and early twentieth century women. She contends:

"*Are these the feelings around in all thinking minds by the nobility of creation, which we have often heard, censured and mis-called womanly and hard? The staid matron and the society butterfly may, through a touch of jealousy, or by reason of their narrow prejudices, condemn women who happy occasion has enabled to call into play those latent forces and capabilities with which they have endowed; but the trophies that decorate their sanctum sanctorum call forth admiration and reverence, rather than constitute mute witnesses of outraged womanhood*."[78]

The tiger was an enigma, ruthless and regal at the same time, hunting it was the most sought after 'masculine' enterprise, it gave the greatest satisfaction and contentment. However the nineteenth century English women still upheld the Victorian notions of woman hood and refrained from indulging in the sport themselves at best they would accompany their male kinsmen in howdahs and remain mere spectators. They would regale at the great skill and inordinate courage of their men who triumphed over 'the king of the Indian woodlands'. But by the turn of the century barriers were being broken, women started to take part in the 'dangerous' sport of tiger hunting and enjoyed tiger shikar as much as men as is revealed in the accounts of Isabel Savory who writes:

"*At last after several days of inaction, we met with our first real excitement, and at the same time shot my first tiger. He was what they call a very bobbery(pugnacious) tiger*."[79]

She goes on to say that in the Deccan, "*…three tigers fell to my own bag*." [80] Courage and bravery two acknowledged male attributes started to be associated with women too. Women abandoned the comforts and security of their homes and ventured into inhospitable terrain, embraced hardships and risked their lives just to experience the thrills of the hunt. Comments Savory:

"*Do not set out on a tiger shoot without being prepared for a great deal of discomfort. But, after all, it is worth it, and a high price had to be paid because it is worth it*."[81]

There was even a change in the sartorial choice of the women who abandoned the long Victorian gowns which accentuated their femininity for breeches and boots which were more suitable as hunting attire. The image of 'society butterflies' flitting about in their elaborate gowns to watch the men competing for the very famous Kadir Cup; the Pig-sticking Challenge Cup in north India was a reality as was the picture of women in breeches and boots, on horseback, pursuing quarry. However the women were cautious, they never went over-stepped their boundaries as they feared a societal backlash and would not like to be categorized as 'fallen' women. So one finds Isabel Savory evincing a sense of unease at the trangressive gender behaviour displayed by women hunters, self conscious about a hunting incident to a fellow huntress that, '*unnecessarily ventilated M.'s shirt and exposed a large amount of boot!*'[82] While Savory celebrated the freedom hunting offered to women; she remained defensive about its implications for gender norms.

The sub continent evoked the same contradictory responses in the memsahibs as it did in the case of the sahibs. However there was a point of deviation probably arising out of the difference in the gazes of the two sexes. The aesthetics of the picturesque played an important part in shaping the accounts of white women writers in colonial India. In the colonial world, where women were relegated to the margins of society yet burdened with the responsibility of upholding the 'home' culture, the picturesque offered them a secure position from which to deal with the reality of India.

The literary mode corresponding to the mode of the picturesque is the mode of sensibility and the accounts left behind by memsahibs are guided by women's sensibilities. Emma Roberts leaves behind a beautiful account of woodland India. She comments:

"*However beautiful the awakening of nature may be in other parts of the world, its balmy delights can never be highly appreciated as in the climes of the East, where it contrasts to the subduing heat of burning noon, renders it a blessing of inestimable value. The freshness of the morning air, the play of light and shade, which is agreeable to the eye, the brightness of the foliage, the vivid hue of the flowers, opening their variegated clusters to the sun, rife with transient beauty;….the joyous matins of the birds, and the playful gambols of wild animals emerging from their dewy lairs, exhilarate the spirits, and affords the highest gratification to the lover of sylvan scenes…*

As the jungle recedes from the dwellings of man, they become wilder and more savage; large jheels spread their watery wastes over low marshes and are the haunts of millions of living creatures."[83]

The Oriental jungles stood in complete juxtaposition to the forests back 'home'. Roberts' account is a testimony to the beauty of wild India, it can almost be compared to the Garden of Eden, and it has sensuality and romanticism interwoven inextricably in it. This is a very feminine portrayal of the jungles of India. However this idyllic world was marred by its 'savage' nature. The jungle was also a very unpredictable terrain, where danger lurked and which had an eerie ambience. It was also the home of ferocious beasts and the breeding ground of pests.

The ‘savage’ and ‘undisciplined’ character of the Indian jungles suited the agenda of imperialism. It was easy to justify the English intervention in this domain on the pretext of imposition of law and order. The jungle too, like the rest of India was ‘the white man’s burden’ and so the onus of ordering and disciplining it lay in their hands. The ‘memsahibs’ were also influenced by the same imperial ideologies. They were after all nurtured in an environment which was guided by the spirit of imperialism. James Clifford has pointed out that ‘the independence was, in varying degrees a myth’.[84] There was gender powerlessness, as still the identity of women was inalienably linked to the identity of their male kinsmen. However, the accounts left behind by them are the accounts of their experiences in this country and their perceptions of India’s ‘Empire of Nature’. The feminine gaze gives another perspective of Wild India.

WEAPONS OF DOOM

Technical developments had a significant effect on the hunting code. Until the 1850’s hunters used the smooth- bore muskets, and muzzle loading rifles which lacked accuracy and penetration and in the case of buffalo, hippo, rhino and elephant made the mortal shot almost impossible.[85] The use of such weapons required a lot of perephanalia, for example, beaters who would beat the animal to the open ground and multiple shots would have to be fired often by many gun bearers, the wounded animal would have to be hounded and repeatedly assaulted to finally claim it. The late 1860’s witnessed the coming of the small and medium bore Express rifle which offered a lower trajectory and higher velocity for a lower projectile with the additional advantage of minimum recoil. Moreover breech-loading made re-loading much simpler.[86] The 1880’s saw the emergence of Magazine rifles but it was the invention of the high velocity Cordite rifles, smokeless and far superior in accuracy and penetrative power that spelled the greatest doom for wild animals. The Indian Field Shikar Book by W.S. Burke gives a detailed account of the shikar weapons and their utility and effectiveness.

“*The best gun for all-round use is a 12 bore…The majority of the guns are now made with the right barrel, improved cylinder and the left half choke. For general use the Number 4 and Number 6 are the best size shot to use; but for quail and snipe, one ounce of the Number 8 is the best charge.*

A heavier 12 bore is useful for wild fowl shooting only, and recommended for preference to a larger bore for shore shooting. The range of accuracy for a smooth bore gun, firing ball is about 50 yards. There are a few bullets now made which can be used in either cylinder or choke barrels. They are safe for use in good quality guns…moreover; more accuracy and striking energy is secured. I would mention, in this connection, Manton’s Patent “Contractile”, Lyon and Lyon’s “Lethal” and Rodda’s “Rotax” all of which have given very excellent results. Sportsmen requiring a weapon with a longer range have the choice of rifled ball guns such as the “Paradox” and “Explora”. They are however heavier than ordinary shot guns.

The modern High Velocity rifles are far preferable to the old Black Powder Weapons which are now almost obsolete, and are more accurate, have a much lower trajectory, and, bore for bore, have nearly twice the power.

For Himalayan shooting one cannot beat the .350 Rigby magnum single barrel magazine rifle. There is also the .375 and the super .30 Holland magnum, powerful weapons with flat trajectory. In addition there are several types of Manser and Mannlicher rifles.

For all round shooting a .400 bore rifle is second to none. The .470 D.B. high velocity rifles seem to be powerful enough for anything, although some sportsmen favour heavier bores such as .500, .577 and even .600 cordite.

For soft-skinned game the .350, .375, .400 and .404 rifles should be used with bullets having half an inch of soft lead exposed above the nickel to ensure expansion. A double rifle is preferable to a single.

Messrs. Westly Richards and Company's rifles are famous throughout the world, and their high velocity intro- express rifles are thoroughly reliable weapons of the highest class. Here mention may be made of their highly useful "Explora". The fact that it increased the ranging power of the bullet to 300 yards is a proof that the "Explora" raised the standard of accuracy of the ball and shot gun at all ranges, and this fact has testified in many sides. Messrs. Westley Richards and Company have now arranged a R.20 bore "Fauneta" ball and shot gun, which provides a very useful weapon for the Indian sportsman.

The .318 bore Accelerated Express, because it is a small bore, probably stands at the head of the small bore rifles, possessing as it does the exceptional velocity of 2,500 F.S. Then there is the .476 Magnum which shots the heaviest charge of any rifle between the .450 bore and the .500 bore and has high penetration and expansion and is set up for use on soft-skinned animals. Other English makers whose names are familiar to all who handle rifles are Messrs. Purdey and Company; Holland and Holland; Messrs. John Rigby and Company, Lancaster, and in India Messrs. Manton and Company; Rodda and Company; and Lyon and Lyon. All these firms have specialities in double and single barreled and express rifles from .240 to .600.

W.W. Greener Ltd.'s "Greener" is ofcourse, as well known in India as in other parts of the world. The "Empire" gun, primarily designed for shooying such as India affords, epitomizes al the qualities which sportsmen look for in their weapons. The "New Model Ejector" called the "Unique" takes high rank among its class. A new model, moderately priced, has been introduced with Manser magazine action, which holds 3to 4 cartridges. It should be popular for Himalayan Big Game shooting.

A powder must posses a number of vital qualities such as pressure, velocity, time of ignition and recoil. For the first man there are 33 grain bulk powders such as "E.C.", "Smokless Diamond", or "Empire", but easy shooting; for the second there are 42 grain bulk powders "Schultze" or "Amberbite" and third will undoubtedly choice "Sporting Ballistic" because here he has powder that is really waterproof.

It was in the British Empire, which comprises the finest hunting territories in the world, that the specialized high- power big game cartridge was evolved. From the sportsman travelling deluxe to the latest arrived subaltern, the British legion of big game hunters formed a wonderful band of experimentalists. Backed by the elite of the gun-making profession, supported and led from the background by our ammunition and powder makers, big game shooting became more certain in its

methods, safer and above all more humane. Today – as always – the best rifles firing the best ammunition are British." [87]

The above excerpt is evidence enough to establish the disastrous effect the development of fire power had on wild animals. A whole new category of gun making and development of ammunitions, to hunt wild animals evolved, which made shooting game easier, as the possibility of missing quarry was significantly reduced. What is interesting to note is that killing animals with the new weapons was considered as 'humane' probably because the blow from them was so lethal that they greatly reduced the death pangs of the animals. This was a blatant attempt to legitimize the actions of the 'self' and a covert ploy to condemn the shikar activities of the natives because the weapons they used were perceived to prolong the death pain of animals and were thus 'inhuman'. All that the 'white- man' did was righteous, it was not only the use of force but also the creation of new theories to justify their actions that helped in the process of exerting sole authority over the country and woodland India was very much a part of it.

TAXIDERMY

Field sports and hunting was an integral part of colonialism. The tradition of big game hunting did not end with getting quarry but it also required the preservation of the killed animals which had great trophy value. The great emphasis laid on the size of the kills, the enthusiasm shown to measure the felled animals and the quest to get 'rare' species were all perhaps with the objective of getting great trophies which once taken back 'home' would be excellent mementos of a life well spent in the jungles of India.

"*Tom Puss (tiger) was dead…Excellent shot. Length, along curves 8 feet, 11inches between pegs, 8 feet 5 inches, weight, 250 pounds. A reward for perseverance…"*[88]

"*The Hybrid…is an extraordinary animal, and was found with a herd of Blackbuck. It used to fight and drive away the other Blackbuck in the herd and was the absolute master of the herd. As this animal lived in a Blackbuck herd, I presume that the father was a chink whilst the mother was a Blackbuck doe…*"[89]

Comments Richard Burton:

"*Killed tiger and decided to take the skin to Theobald at Mysore.*"[90] Shikar trophies in the form of heads, skins, ivory or whatever, were not merely a prize for a hunt successfully completed, but also tangible souvenirs of happy days spent in good company, enjoying the sights and sounds of a beautiful countryside and incredible woodlands. It can be safely asserted that service in India was a truly memorable experience, not just a job or duty because of the opportunities of leisure hunt that the country offered; small wonder then that innumerable animal trophy were prepared by the taxidermists and so many were transported not only to England but also to other parts of the world. The trophies mounted on the walls of the living rooms of the sahibs' back home' were testimonies to their bravery and valour. A whole new industry; taxidermy evolved, dedicated to the preservation of shikar animals. They provided service to those engaged in field sports and hunting. Taxidermy firms came up in and around the small town of Mysore. The Theobalds were probably the first to set up a

taxidermy business there, in the early years of the twentieth century but its founder died in 1919 and the business closed down after that. Taxidermy scaled great heights under the firm named van Ingen and van Ingen which was founded by one Eugene Meville van Ingen. Then there was the South Indian Taxidermy Studio, established by Mr. Pardhaniah in 1935 at Mysore. Tocker and Tocker was another prominent taxidermy company, established in 1906, in Bangalore. There products were of good quality and they were the chief competitors of the van Ingens. There were plenty of other taxidermists in India, especially Calcutta but few could match the expertise and quality of the van Ingens.

The van Ingen taxidermy operation was of major significance in at least three distinctive ways:

i. Theirs was an early use of papier mache forms for head trophies and whole mounts, enabling not only a high quality of output, but also a consistency that characteristically eluded most other taxidrmists of the day.

ii. They were based in a large, purpose- built factory and developed into a thriving business employing upto 150 workers, possibly the largest taxidermy operation ever.

iii. They created a huge number of trophies, tens of thousands in total. These included an astonishing number of tigers and panthers that were a particular speciality of the firm. There quality was almost unparalleled and this is borne by the fact that their customers included not only the Indian gentry and senior figures in the British Raj, but also the Ethiopian King, Haille Selassie, the Shah of Persia, the King of Afghanistan and a number of other Hollywood stars. A 'thank-you' letter from the Viceroy attests to the same.

"*Viceregal Lodge, Simla,*
8th May, 1928.

The two tiger skin that His Excellency shot in Rewa have been received safely. They have been very well set up and His Excellency is very pleased with them.

(Sd.) C.O. Harvey,
Lt. Colonel,
Military Secretary to the Viceroy." [91]

After getting quarry it was instrumental that the animal was preserved temporarily before being sent to the taxidermists and the treatment of fresh skins and masks was simple. However it was absolutely essential that sportsmen under no circumstances should have dried a skin in the hot sun or near the fire, or pack skins treated with wood ash, arsenical soap or carbolic, till they were thoroughly dry. It was essential for the skins and masks to be in perfect condition to have produced perfect trophies.[92] The pamphlet, 'The Preservation of Shikar Trophies' was the Bible for preservation of killed animals.

"*We strongly advise all sportsmen to posses themselves of this admirable little book before setting out on their next shooting trip. The novice can learn from it how to supervise intelligently the all important process of skinning and initial preparation of his trophies, and thus be saved much*

anxiety lest his first spoils of the chase be ruined by wrong treatment… And we venture to think that even the old campaigner may pick up a hint or two from the book that he will be glad of when atlast he brings to bag the 10 feet tiger or the 'father of all sambar' of his dreams." [93]

Tiger skinning was an art and not knowing how to do it perfectly can lead to things going awry as had been experienced by Richard Burton. He commented thus:

"*I was much annoyed on getting to camp to find the tiger's skin going wrong in parts. He was not properly skinned.*" [94]

It is interesting to note that taxidermy firms of repute focused on big game trophies, occasionally perhaps smaller mammals, crocodiles or snakes but never birds which were not worth the bother. The van Ingens for example explicitly stated in their Brochure of 1931:

"*We donot undertake the mounting of small mammals and birds, or the conversion of sambur, crocodile and other hides into leather*." [95]

The van Ingens were essentially tiger taxidermists. In fact big game trophies was the most sought after by the colonial glitterati and even their more humble compatriots though the latter could rarely afford the luxury of a van Ingen trophy. Tiger heads mounted on shields, a speciality of the van Ingens was the most coveted trophy, as the memorabilia was the best testimony to one's bravery and courage. The use of shields to mount trophies date back to the 1880's when European taxidermists used the same. The shield evoked the ideas of skill, fighting proficiency, perseverance and valour. By using the shield in hunting trophies the connotations of chivalry, prowess in war and social status came to be associated with them. The hunting trophies were thus invested with significance much beyond the triumph of acquisition of ferocious beasts.

The fact that a whole industry evolved based on the preservation of animals killed in shikar, itself is a testimony to the enormity of massacre unleashed on wild animals during the colonial times. Added to this were those animals which were sought to be eradicated as they posed a threat to a settled agricultural life and one can easily discern the mayhem unleashed on Wild India.

Shikar or hunting was the best leisure activity that could be pursued in India. The land of heat and dust, of pest and pestilence, of disease and death, acted as a great deterrent, few Englishman would come to serve in this country of their own volition. However the opportunities for sport hunting found here was an excellent bait to lure reluctant officers to this land. The hunt went on to have various uses and implications and was not confined to being a means of leisure alone. It fitted into the imperial agenda of the English. Hunting also served as a field of war. It was intrinsically woven into the ideology of imperialism.[96] It embodied an imperial world in microcosm, an elite ritual with its insistence on similar virtues of manliness, courage endurance and fortitude.[97] Hence killing predators like tigers was considered to be the most satisfying. But the hunt was not confined to bounty hunting or being a well-loved sport alone, reward hunting to eradicate animals, conceived as vermin was also equally important. The hunt resulted in a veritable war against errant species. The practise of wiping out scourge was not new to India but no previous ruler had attempted to exterminate any species, now the tug of war between man and nature became a fight to the finish.[98]

By the late 1870's the average number of wild animals destroyed were more than 20,000[99] added to this was the mayhem unleashed by sports hunters, so, the enormity of loss can be easily

understood. Animals were targeted after taking into consideration economic and cultural factors. Carnivores unless valued by sports hunters continued to be listed as vermin. Elephants once condemned because of their depredations that caused destruction of crops and loss of property began to be protected as early as in the 1870s because of their importance in warfare and to haul timber but the cheetah had no such use nor was it a trophy- worthy animal so the assault on it went on unabated. Some animals were lucky to get protection because of local practices. For example the black buck was revered and protected by the Bishnoi community of Rajasthan, the dhols or wild dogs protected by the Kolis of Maharashtra as they curbed the number of deer which destroyed crops and drove away tigers that lifted valuable cattle and then there was the concept of sacred groves, where communities protected forests and animals because of religious or cultural reasons and even the temptation of rewards could not lure them to kill animals.[100] But in general the blow to the population of wild animals was unprecedented, the cheetah vanished from woodland India, the lion was confined to Saurashtra alone, the tiger battled for survival. The extension of agriculture had always taken its toll on animals but in colonial India they faced a state sponsored assault. The situation was further aggravated by trophy hunting and mega fauna like tigers, bisons, rhinos, leopards and those animals valued for their regal antlers or exotic skins and plumage faced a virtual carnage. However by the late nineteenth century the voice of the conservationist also began to be heard. But the conservation of these early years was with specific interests for timber and conserving game animals for sports.

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CHAPTER FIVE

SLAUGHTERING 'VERMIN' IN COLONIAL BENGAL

India's wild nature was glorified and romanticized in the West but more than this there was the compulsion to 'improve' India, both in the capitalistic sense of generating enhanced income and profit from the land and in terms of the aesthetic sense of transforming landscape that seemed either 'naked' or obscurely overgrown with unsightly jungles,[1] infested with wild animals. The objective was to carve out a 'humanized', cultivated and orderly landscape over a wild and unkempt one.[2] This ideology of improvement was not confined to the officials alone but also missionaries and clergymen espoused the cause of improvement. The Agricultural and Horticultural Society of India was set up by the Baptist Mission and is a testimony to the fact that an improving agenda could simultaneously be even an evangelizing one, replacing 'heathen' jungles[3] with more orderly alternatives.

"*The draining of the marshes, the cultivation of large tracts of country now not only useless, but the resort of savage beasts and the source of severe diseases- improvement of stock- the creation of a larger quantity of the necessaries and the conveniences of life and raw materials for manufactures…*"[4] was the major objective of the colonial state and their appendages. Restoring 'order' in what was perceived to be a lawless and chaotic domain was of primary importance to them and Bengal being the loci of the colonial administration till 1911, was one of the first regions that was sought to be 'ordered'. Woodland Bengal personified 'disorder' and so the procedure of ordering it was taken up in right earnest here, this was done to secure more and more areas under the plough and it resulted in drawing and re-drawing of the boundaries of the wild land. More over the wealth of the woodlands was quickly discerned and so the process of extending control was pursued relentlessly and this brought the colonial state into direct confrontation with the wild beasts that abounded in wild Bengal. Vermin eradication featured high in the list of priorities, venomous snakes and dangerous tigers were the two most destructive animals that roamed in the wild lands and so they faced the greatest threat, the English resolve to weed out pests led to the systematic decline of the faunal wealth of the country.

The classical mode of vermin eradication was hunting and as a combination of the pragmatic compulsions of extending empire into forest areas and the symbolic merits of affirming imperial rule everywhere in the colonies, hunting took its place in the various techniques of ordering the jungle landscape.[5] With the increase in British control over the general administration in forested areas, increased the work of vermin eradication. Saving hapless villagers from the jaws of a predator fitted perfectly into the colonial state's endeavour to project itself as the protector. The more the locals accepted the sahib as the saviour the easier became the task of vermin eradication. If the natives could be convinced that wild animals jeopardized their interests, reward hunting could be more successfully implemented as the colonial regime needed their unflinching support and help to minimize the threat from menacing beasts. Hunting or shikar could be pursued not merely as a leisure activity but also as a means to order obnoxious beasts. It served the purpose of clearing landscapes of

vermin as also establishing the superiority of the white man who were fearless and undaunted by the challenge posed by ferocious wild beasts.

Bengal was the abode of the enigmatic Royal Bengal Tiger, regal yet unpredictable, the animal overwhelmed the English who were used to the hares and rabbits and foxes and jackals back home. They were obsessed with the beast and thought it to be their greatest contender in this country but it was not the only predator that challenged the authority of the mighty English; Bengal's jungles teemed with an immense variety of beasts; bison, rhinoceros, elephants, wild buffaloes, bears, wild boar, deer and venomous snakes and whenever a species seemed to encroach on the interests of the colonial power, they were condemned as vermin so the assault on them went on unabated for most of the nineteenth century. Many were driven to the brink of extinction in the plains and uplands of lower Bengal by the end of the century. Nineteenth century Bengal was described as the paradise of pig-sticking and bears were a menace to the sugar-cane fields but by the twentieth century their numbers were significantly depleted. In the early nineteenth century rhinoceros were found in the plains of Bengal but by the end of the century they were not found there anymore. Vermin eradication took a very serious toll on Bengal's faunal resources.

BENGAL: THE PARADISE OF SHIKAR

The British settlers embarked on a widespread carnage of wildlife, and the introduction of fire-arms further exacerbated the assault. Animals were sought to be exterminated both for the extension of the arable as well as for their economic value in addition to being pursued for shikar. The faunal wealth of Bengal was accounted for by Ralph Fitch who came to India in 1583 to Akbar's court with a letter from Queen Elizabeth I. He cruised through the Ganges from Prayag to Bengal and reached a place called Tanda, near Malda. In the forests of the neighbourhood he found tigers, wild buffaloes and numerous waterfowls.[6] As he reached Sonargaon (Ralph calls it Sinnergan) he found the villagers defending themselves against tigers and jackals. He mentions the island of 'Sundiua'[7] which he passed on his way to Pegu (this is one of the earliest English accounts on the Sundarbans), here he found impenetrable mangrove forests and which was the abode of tigers. Alexander Hamilton, who came to India in the eighteenth century, passed the Sundarbans on his way to Hooghly and he commented, "*There are so many rhinoceroses on those islands yet they are not so dangerous neighbours as the tigers, yet when provoked they will assault any living thing.*"[8]

Captain Thomas Williamson was a British officer of the East India Company and he served for twenty years in Bengal. He published the *Oriental Field Sports* in 1807 and this was one of the earliest documents on the hunting escapades of the shikar loving Englishmen in India. He wrote: '*In the lower provinces it (surpal or tassel grass) occupies immense tracts; sometimes mixing with and rising above coppices; affording an asylum for elephants, rhinoceros, tiger etc. deer and hog lurk in the same grass.*"[9] His account is a wonderful exposition of not only the great variety of the faunal wealth of the Lower Provinces and the opportunities for shikar expeditions but it is also a remarkable document projecting the English assumptions about the various species of wild animals, this creation of stereotypes helped in the colonial project of 'ordering' wild India. The tiger though the most

important was not the only animal to be type-cast, other animals too were subjected to the same treatment and this is very evident from this early text on India's fauna. Elephants, hogs, rhinoceros all were portrayed as dangerous and thus encountering them was immensely gratifying and killing them justified. Moreover animals had an economic value and this made shikar all the more attractive. Williamson narrates the great challenges faced from the wild beasts in the woodlands thus making shikar an extreme sport:

"*It should be understood that the wild hogs pace and powers are not to be estimated by any comparison with the tame swine. Those unacquainted with the vigour and speed of the jungle hog, will be surprised to learn that it requires a good horse to keep near a moderate size hog and that it is by no means uncommon to see, a moderate size animal overthrow many horses with their riders in succession.*"[10]

Moreover hogs were destructive as '*they delighted in cultivated situation.*[11]Elephants too, revelled in the cultivated landscape, they loved the tender, young ears of paddy and often wandered into the fields destroying crops, their beautiful white tusks were also much sought after and were valued both in terms of being exotic trophy and economically as they commanded a very high price in the international market. Catching elephants was surely a difficult task, the greatest impediment being the immense size of the animal. "*Elephants were caught in kheddahs by means of koonkies [12] and by phauns. This kind of sport cannot be classed among the effeminacies of the day! In many situations where elephants abound it would be impracticable to construct kheddahs… The peasants find them very troublesome and bad neighbours and would willingly destroy them. The ordinary practice in such situations is to catch them in pits. A strong objection exists against elephants taken in pits, they are generally lamed and all pitted elephants were purchased with diffidence and under some depreciation.*"[13] Two varieties of elephants were found in Bengal: the Chittagong and Nepal varieties. The Chittagong variety was "*larger in size and more substantially formed, whereas Nepaul elephants are extremely defective not only in the three grand points, viz. stature, strength and beauty, but in constitution also. Hence they are of much less value than those from Chittagong, Tipperah and Silhet.*"[14] The rhinoceros was found throughout Bengal, from the Duars to the tidal country of the Sundarbans but "*seldom to the west of the Ganges. These animals are partial to the surpul or the tassel grass.*" The animal resided in "*the impenetrable jungles, the unparalleled ferocity of his disposition, his almost invulnerable coat of mail, and the rapidity of his motions, all oppose the most formidable obstacles to an intimate acquaintance with him in the wild state.*"[15] The rhinos in Bengal were of two types the Javan rhinos found in the Sundarbans[16] and the much rarer Sumatran rhinos found in Comilla, Chittagong and the Bhutan Duars.[17] The jungles of Bengal had various species of deer which were food for the higher predators and some like the sambhar was highly prized for their skin and beautiful horns. "*The sauboor or elk seen occasionally on hills stretching from Midnapore to Chunar grow to an immense size and their skins are very valuable. The males are very black, having tanned points and carrying broad heavy horns, the does are inferior to the buck.*" [18] Large varieties of parahs were found in Jungleterry region of Bengal and Bihar. The Jungleterry was also a favourite site of birding and the water tanks of Bhagawangola, near Murshidabad was another important birding site, frequented by exotic ducks like whistlers, widgeon, various storks, cranes,

herons, quails, floricans etc. towards the end of winter, swarms of ortolans (buntings) would arrive like bees.[19]

But it was the tiger which captured the imagination of the sahibs like no other animal and Bengal abounded in them and they were found everywhere from the Duars to the sal forests of the west to the plains of Murshidabad, Malda, Khulna, Dacca and Rangpur, the hills of Chittagong and Tipperah and Sunderban was the *headquarter of the animal in Bengal.*[20] "*In some parts and especially in the villages situated near the long belt of jungle on the western boundaries of Bengal, during the day may be heard to howl in strains. Often in the mornings the tracks of one or more tigers may be seen throughout the villages.*"[21] So the tiger was a threat to life and it terrorized men. The natives had their indigenous means of warding off the menace; they used bows, arrows, spears traps and even a contraption like a guillotine, moreover they co-existed with the beast from times immemorial and had devised their ways of keeping away from the predator. But the sahibs had to confront this mega fauna and was bewildered at first, however the initial dread gave way to a resolve to overcome their fear and overpower the beast, they even found an opportunity to exert their superiority by playing the role of a protector to the 'distressed' natives. They took up the arduous task of exterminating the animal that was *a treacherous beast* [22] and indulged in an activity replete with danger to save the natives from a scourge. It was a self assigned task that they took up to save the 'weak' and 'helpless' natives. The assumptions about the natives helped in creating stereotypes which in turn helped them in exerting control. The projection that the white man was superior to the Indians was a ploy used to facilitate exertion of power.

The tiger was found nearly everywhere in Bengal but their favourite haunts were the grasslands and the soft and thick moonje grass thickets. The sahib searched for them in all places, they needed to be exterminated to make the province safe for human habitation. The areas overgrown with grass and covered with brambles the ideal abode of the tiger, was converted into lush agricultural fields, i.e. the wild was converted to arable and thus made economically viable. Williamson cites the example of Cossimbazar Island; *which though not exempt from evil, has changed from the state of wilderness to a rich display of agriculture.*[23] The endeavour of the colonial state was to *speedily annihilate the animal, when perhaps a tiger may be as great a rarity, as formerly it was an incessant object of terror*" [24] and this effort was persistent which resulted in such steady depletion that by the turn of the century preservation methods needed to be initiated to ensure enough supply of the animal to continue the perusal of the arduous amusement of tiger shikar.

Game was so abundant that in the eighteenth century that it was even found near the British capital of India; Calcutta. Warren Hastings confessed to hearing the spine chilling roar of a tiger near Chowringhee, the heart of British Calcutta.[25] Calcutta was a bastion of sports for the Anglo-Indians and it included cricket and hog sticking in equal measure. Edward Braddon was a great aficionado of hunting and often recalled his days of shooting snipes and water birds in the jheels of Howrah and Kanchrapara, the gram fields of Budge Budge and the wetlands of Krishnanagar. Budge budge also offered the opportunity to track down the crocodiles in addition to the quails and snipes.[26] Perhaps one of the best accounts of game in Bengal comes from Edward Baker who recounts that there was such an abundance of game that one could shoot all the year around.[27] But Baker was also quite

concerned that the absence of a close season was taking a toll on the wild animals and birds of the province. "*Deer, hares, antelope floriken, pea-fowl, jungle-fowl, pheasants, spur-fowl and partridges plentiful twenty years ago are fast disappearing. The native 'shikaree' is a true pot-hunter, utterly indifferent as to sex or season as also to the fact that by destroying game during the breeding-time he injures his own interests…*"[28] The act of making the native into the 'other' was done astutely, here was the superior authority condemning the activities of the indigenous people and making them the culprits responsible for the destruction of fauna and thus paving the way for the future prescriptions for game protection of the country.

Bengal not only boasted of avian and terrestrial fauna her waters were full of fine and well-flavoured fish, migratory birds started coming here from mid- October and snipes were specially numerous in Lower Bengal. A little later, vast flocks of wild geese, ducks, teal and cranes emerged offering ample scope for fine sport.[29] Winter was the season for shooting birds in Bengal as her rivers and numerous other water bodies played temporary home to the winged creatures who came to procreate from distant lands. By March different treasures awaited the hunter. "*Hog- hunting and coursing may be had on 'churs' or open plains and islands on or bordering the great rivers. Deer and tiger shooting on the backs of elephants are possible in a limited way. By the end of December, a trip to the Soonderbuns is tolerably pleasant, but it should be made in sea-going boats or small steamers, when shots may be obtained at spotted deer and wild hog, probably at a tiger, and possibly at a rhinoceros or two but a more profitable company of spotted deer, antelope and wild fowl of all kinds, with the remote chance of meeting a wild buffalo…With February hunting and shooting have improved, in Midnapore and Bankurah bears may now be sought successfully in the 'sal' woods. The serious business of sportsman, the pursuit of the nobler beasts commences from March and is carried on through the scorching days of April and May, in the grass and reed jungles of Purnea, Maldah, Dinagepore and Mymensingh, and along the foot of the mountains from Julpigoree to Assam, among the rocks of Manbhoom, and the bison-haunted hill sides of the southern parts of Chota Nagpoor. By the middle of June, the monsoon rains set in violently; guns and rifles are put away in air-tight receptacles; spears are hung up and the trophies of the chase of the past season are looked up, dried when the sun breaks out hotly, to be repacked or soldered down in tin and dispatched home to friends and relatives.*"[31] Bengal's repertoire of wild animals made it a sportsman's El Dorado and the sport was pursued in all terrains and by engaging in all imaginable forms of shikar.

SHIKAR IN NORTHERN AND SOUTHERN BENGAL: SIMILARITIES AND DIFFERENCES

Bengal extended from the Darjeeling hills to the mangrove swamps of the Sundarbans, from the eastern edge of the central Indian plateau to the Chittagong hill tracts, the differences in topography, climate, soil, precipitation resulted in great variations of flora and fauna. The Europeans were bewildered when they encountered this land of diversity which defied the established European notions of India being tropical. Bengal was just one province of this vast country and she too did not fit into the tropical mould constructed by them, the tidal lands of the Sundarbans was something that was totally juxtaposed to the India of the European imagination, so was the red lateritic land of

western Bengal, the swamps of the Duars and the grass and reed jungles of the riverine plains. Bengal boasted of a great variety of scenery, the flat plains giving way to the Himalayan and the Khassia ranges whose grandeur could not be surpassed in the whole wide world. In the Chittagong Hill Tracts, in Sylhet and the extension of the Chota Nagpur plateau there were many lovely bits of scenery. For men whose activities did not take them beyond Calcutta and those who departed from Bengal in a streamer down the Ganges, Bengal appeared to be merely as a flat, monotonous country[32] but in reality it was much more diverse, as was her wilderness and the wild animals that lived in it. Shikar activities too, had to adapt to the terrain, the foliage and the quarry available to the hunter. For example howdah shikar the safest and the most luxurious could not be pursued in hilly, inhospitable terrain nor could it be undertaken in forests covered by thick cover; it was best suited to the grassy plains, this was however the region where the most coveted animals were found. In the upper reaches of the Himalayas, the best way to hunt was probably by foot and with the help of a native guide, whereas in the thick, impenetrable jungle that lay at the foothills of the Himalayas, hunting from 'machans' and using of decoy animals would be beneficial. Hunting in the Sundarban delta was the most challenging, as boats had to be used to negotiate the numerous creeks and rivulets that criss-crossed the area and there was always the possibility of being attacked by the ferocious tigers of this region who were expert swimmers, not to mention the extremely cunning crocodiles that infested its waters. The chase was of course pursued in the flat terrain of Lower Bengal and the most sought after sport of the area was hog- hunting or pig-sticking.

Hog Hunting or Pig-Sticking:

Robert Baden Powell called pig-sticking the king of sports. "*There is no doubt that pig-sticking as a sport transcends any other. It is carried out by a party of three or four sportsmen mounted on horses and armed with spears, who ride down and fight with the boar of the country. It needs a cool and confident man to participate in pig-sticking.*"[33] The sport was encouraged by the military authorities as a wonderful mode of training to hurl the spear and spruce up the riding skills. General Charles Godfrey Mundy who served the East India Company has left very interesting facts about the sport. He writes about the Calcutta Tent Club, of which he was a member and which was set up as a pig-hunting society of the European settlers in Bengal. This itself is a proof of the substantial availability of wild pigs in the plains of Bengal, in fact they were found in the vicinity of Calcutta. The Calcutta Tent Club organized pig-sticking outings in the neighbouring jungles of Calcutta, circumscribing a range of fifty miles. Mundy recounted a deserted silk factory at Buckra, maintained by the Calcutta Tent Club for the pig-stickers, amidst an extensive forest situated far off from Calcutta.[34] Edward Baker in his 'Sport in Bengal' alludes to this magnificent sport and its scope in Bengal. According to him the sport generally commenced in December as soon as the rice crops were harvested but in the chars and islets it began a little earlier. "*The wild hog is the commonest of all wild animals of the first class in Bengal and affords the best sport in the world where the country is good for riding. Pig-sticking was a manly sport, in the fact of it being a well matched contest between an armed and mounted man, and a brave, fleet, powerful and savage beast. Hog-hunting with the Calcutta Tent Club was a princely sport and the country hunted by the Tent*

Club was mainly that between Calcutta and Diamond Harbour, with an occasional visit to some distant localities. The sport is still good in the districts of Pubna, Moorshedabad and Rungpoor and may be enjoyed in Nudiga (Nadia) Furreedpore, Mymensingh, Tipperah, Noakholly, Maldah, the twenty four Pergunnahs and Midnapoor districts once famous for the excellence in hog-hunting, but no longer such as they once were, owing to the gradual conversion of the grass- covered plains into rice fields."[35] The securing of the wild landscape for agriculture was thus jeopardizing the survival of the lesser mammals. What was left unsaid and what can be easily deduced from the account was that the number of wild pigs had decimated significantly due to the sahibs great penchant for the sport of hog hunting. Southern Bengal thus was important in the hunting map of Bengal because of the existence of the wild boar which offered the Anglo-Indian hunter great opportunities for a much loved sport – pig-sticking or hog-hunting.

Coursing:

Coursing began during the same season as hog-hunting; and pursued in the districts of "*Nudiga, Pubna, Mymensingh, Rungpoor and Maldah in Bengal but hares become scarcer year after year and coursing is now restricted to foxes and jackals, thanks to any close season for the game.*"[36] This sport too was confined to the plains which afforded the rider to chase game unhindered.

Tiger Shooting:

The tigers cast a spell on the sahibs, they imagined them to be present everywhere, and stories of their depredations, their ruthlessness, and the threat posed by them to lives both human and live-stock made them the avowed enemy of the Englishman. They were seen to pose the most 'masculine' of challenges in an otherwise effeminate country, so, they were the most sought after, eliminating them would ensure the easier establishment of order in a land of chaos. Tigers were sought to be exterminated and hunting was a mechanism employed to achieve the same. The mayhem unleashed on the beast resulted in one of the worst massacres perpetrated by men on animals. George U. Yule of the Bengal Civil Service ceased to count his tiger trophies after he shot dead 400 tigers in Eastern Bengal between 1831 and 1856. Frank B. Simpson of the same service and the author of 'Letters on Sport in Eastern Bengal' hunted 600 tigers in his career of twenty one years. There was no sport like tiger hunting; the most coveted trophy was a tiger trophy, testimony to the intrepidity of the 'self'. The tiger hunting season commenced in early March and ended with the setting of the rains in June. Bengal was the home of the Royal Bengal Tiger, and big game shooting became a passion for the sahibs and the animal was plentiful in the province. The best tiger districts were Maldah, Bogra, Dinagepore, Mymensingh, Julpigoree and Rangpur and of course the Soonderbuns, in which resided the most cunning and ferocious of the species.[37]The animal was also found abundantly in Assam. When the Europeans first came to India they were found to roar even on the roads close to Calcutta. Writing of the river running under the field of Plassey, Captain Williamson names it the *Bangrutty* , i.e. the tiger river; the area was covered by large grass jungles teeming with tigers, buffaloes etc. So Murshidabad too, was tiger country. "*Berhampoor appears to have been in the centre of the very best sporting country, including both banks of the Bhagirutty and Jellinghe rivers from west to east and*

from Chagdaho to the Ganges from north to south. Fifty years ago, tigers and panthers were abundant within ten to twenty miles of Dacca. The roads about Santipoor, Ranaghat and Chogdaho were unsafe on account of tigers." [38] The *moonje* grasslands of the Bengal plains was the best abode of tigers though one found them in the hilly terrain of the Chittagong Hill Tracts and the Himalayas and even in the sal forests of western Bengal. According to Baker there was a difference between the hill tigers and the tigers of the plains; the former is '*stouter and shorter than the tiger of the plains; the tail of the former is also shorter in proportion to the length of the body, according to my observation… In Bengal there existed all three kinds of tigers: the 'loda bagh' or those that lived in the hills and forests and subsisting on deer and other animals, and rarely showing himself in the habitation of men, the 'oontia bagh', a game killer and the 'aadmi khanewala bagh, or man-eater not numerous but desperately skulking and cunning. There was in Bengal the Soonderbun tiger who led an amphibious sort of life whose distinctive characteristic is the utter fearlessness of man and its inveterate propensity to kill and devour him on all and every opportunity.* "[39]

Hunting on elephant back was the commonest means for pursuing tigers though it was a very uncertain sport as it was difficult to find a tiger from the backs of *pad* elephants, as the tigers sought concealment in the thick grass or bushes. However seasoned elephants usually were adept at giving signals of the presence of tigers but the sport in general required a lot of patience and perseverance. Beats were organized by natives to drive out the tigers in open ground thereby facilitating the cause of the sahib and even the memsahib hunters, who shot the beasts from the vantage of their howdahs but all Europeans did not or could not afford the luxury of *howdah* shikar nor could this form be employed on all terrain. In the Sundarbans boats had to be used to negotiate the numerous creeks and rivulets in this den of the ubiquitous tigers. Shooting the Sundarban tiger could probably be termed as an extreme sport not only because the animals of this region were notorious and acquainted with the habits of men but also because of the uniqueness of the tidal country. *Machan* shikar was very common mode of shikar; especially pursued in regions of tall forest cover or on hilly areas, the *machan* was used to wait for a tiger if there was *khubber* about the animal, bait in the form of a goat or a calf was tied to a nearby tree to lure the animal. This was one of the safest methods of hunting, often accompanied by the womenfolk. Sometimes natives organized a *hunkah* to drive the animal to an open space near the *machan* for the sahib or the memsahib to do the honours. But this form of shikar required a lot of patience as it was not easy to get the desired animal and the sportsmen had to wait for hours, often days in the hope of getting their quarry. "*A fortnight had nearly passed since my arrival; five more men had been destroyed, and, notwithstanding all our efforts, a glimpse for a second or two was our sole reward. On the thirteenth day the tigress was ours!*" [40] Perseverance was the key to this form of hunting and the rewards reaped gave the sahibs great joy and the chance to prove to the natives their sheer power and courage and undeterred determination, if the tiger was a man-eater the greater was the opportunity to prove their indomitability, as also their superiority and thereby to naturally take up the role of being the protector and hence the sole guardian of the helpless natives. Tigers were often pursued on foot, especially in the northern hills, in the company of a native guide but this was one of the most daring of sports not pursued by many. The tiger was found almost everywhere in Bengal, there was no north south divide as far as the animal was concerned and the

best and commonest mode of shikar employed was hunting on elephants and helped by a crowd of native beaters.

Buffalo Hunting:

Wild buffaloes were abundant in the districts of Eastern and Southern Bengal, not as in such large herds as in Assam but still plentiful in Maldah, Dinagepoor, Julpigoree, Dacca, Fureedpoor, Noakhali, Backergunge and the salt tracts of Midnapoor. The animals roamed about in the *churs* of the great rivers and the swampy plains of the interiors in herds of hundreds. There were splendid hunting grounds on the *churs* of the Meghna and Brahmaputra rivers; around the vast *jheels* and marshes in the districts of Nadiya, Jessore, Purneah, Maldah, Pubna and some other places as also where the manufacture of salt was carried on for Government, as such tracts were favoured by the buffaloes, as well as deer and wild hogs.[41] They preferred the areas where gigantic reeds grew but they sought shelter in heavy jungle in midday. Buffalo heads made great trophies and were sought after mementoes of the great shikar days spent in the jungles of Bengal. The animal was "*as brave as a boar, and as ferocious as a tiger or panther. Instances have come within my own knowledge of mounted hunters having been driven clean out of the field, becoming the hunted in their turn; and of stalkers on foot who have failed to bring down the charging bull or cow, barely escaping with their lives, sorely wounded and battered.*"[42] Buffaloes were stalked on foot, in the open or in covert but this required nerve and caution and riding down buffaloes on horseback on fairly good ground was excellent sport, and when the ground was indifferent, or positively bad, the sport was exciting and even dangerous. Wild buffaloes were also speared on horseback by bold riders but it was an adventure not oft repeated. Buffalo shooting was probably not pursued in the early nineteenth century or before because old English sporting magazines do not mention the sport. It is probable that before the coming of good, precision guns the sport was not indulged in, or probably because the coverts of these animals had been so extensive and often impenetrable, the hunters did not take the risk of getting these enormous brutes.[43] Buffalo shooting required bullets which had very good powers of penetration, so as fire power improved the buffalo too, started to fall prey to the sportsman's gun.
Hunting of buffaloes was best undertaken in the flat plains they were not found in the mountainous terrain of the north but the northern districts of Julpaiguri and Dinajpur abounded with them and shikaris found ample opportunities to indulge in the sport there.

Panther or Leopard Hunting:

Panthers were of several varieties and Baker observed that there were roughly three varieties of the panther: the leopard; further divided into two groups; the greater and the lesser varieties, secondly the black panther and thirdly the clouded panther.[44] Panthers were numerous throughout Bengal and they often lived in the vicinity of settlements. The depredation caused by the beast to human life and livestock was immense and it was feared as much as the tiger. In fact it was also called *bagh* as the tiger was called. "*The panther among the predatory beasts is remarkable for its habit of getting into places where he ought not to be. Some are incorrigible as bold, disregarding*

chastisement received or the presence of man."[45] The panthers of the first group were more plentiful in Eastern and Northern Bengal than in the Lower Provinces. "*A gentleman who resided in the Maldah district eleven years ago has killed over three hundred, without making their pursuit or destruction a special task; simply shooting them from time to time in the vicinity of his place of residence….Purneah, Dinagepoor, Bograh and Kuch Behar are particularly well stocked; and any one choosing to make a pursuit of panthers a speciality, might secure a great bag in those districts in the course of a single season….*"[46] Panthers of the lesser or tree variety were sometimes speared off horses without undue risk to steed or rider, if the attempt was not made single handed or upon inhospitable terrain. The spears used in this case had to be extremely keen otherwise there was a possibility that it would bring danger on the hunter or his horse. The animal was chased on horse-back and beaten out of their coverts and would have to be speared very deftly on coming within striking distance of the beast, otherwise it would strike back to fatally wound the rider or the horse. Guns were also used to shoot panthers from horses. Hunting panthers in coverts with dogs was reported by Baker.[47] The clouded panther and the black panther were very rare, the clouded panther a native of the Malayan Peninsula was found in Chittagong, Assam and southern parts of Cachar and Sylhet. The black panther was found in small numbers in the eastern districts of Bengal, in Assam and the Hill Tracts,[48] both these panthers made for exotic trophies when hunted by the fortunate few. The hill leopards were rather elusive and getting them in the high mountains of the north was indeed a great achievement as the rare animal had great trophy value.

Bear Hunting:

The bears found in Bengal were shaggy, black animals mostly found rambling in the mango orchards, recounted Captain Williamson and he encountered them several times as he travelled in his palanquin from Chemar to Calcutta.[49] The sloth bear was fairly common in Bengal and in the 1880s was still found abundantly in the districts of Manbhoom, Midnapoor and Bankurah. The Malayan variety of bear was found in the hilly areas of Tipperah, Chittagong and Darjeeling. The sloth bear was larger and fiercer and their pursuit was a sportsman's delight. Bears loved to live in the sal forests and when disturbed were found in villages and cultivated fields, they were particularly fond of sugar-cane and Indian corn. They were very fond of *mowha* too, and in April when the *mowha* cast an intoxicating spell on the forest they came out with their families to savour the intoxicant. "*The ordinary mode of following the sport of bear-shooting in Bengal is to have a drive up to a line of machans or platforms, constructed upon selected sites, the beaters some hundred in number – driving a hill or a sal forest, from one to three or four miles and then driving back again to the same machans, from the opposite side. This is by no means an exciting sport, except to young hands…but it affords openings to pleasant picnics and much social pleasure, especially in the cold season when ladies can join in such parties. Better sport was to be had in beating rocks, hills and woods by hundred fifty to two hundred beaters only and the bears shot by using rifles hidden behind boulders and bushes.*"[50]

Western Bengal was the favourite abode of the animal and being relatively benign sport ladies participated in it. The brown bear was found in the Himalayas and the Himalayan black bear lived

below the snowline, they too were hunted by the sport shikaris as these animals afforded coveted trophies.

Hunting Rhinoceros:

There were three distinct varieties of rhinoceros found in the Lower Provinces: the great Indian, the Sunderban and the two-horned Malayan rhinoceros. The first was the largest, the second almost as large and the third the smallest and rarest found only in the Chittagong Hill Tracts. [51] Rhinoceros hides had great market value and had been traditionally used in India to make shields. Sylhet was a market for rhino hides. The horn of the rhino was also coveted as an aphrodisiac. These beasts inhabited the densest and remotest jungles of grass and reeds in Eastern Bengal and Assam and were not attractive as game, but some preferred it to the tiger. Hunting of the rhino was undertaken at dawn with two or three elephants, and was patiently tracked till found and slain, this was a sport but rhino hunting by surrounding the beast by a great line of elephants, and then riddling it with bullets and mobbing it to death, another means of killing the rhino could not qualify as a sport.[52] Lower Assam, the district of Goalpara and the banks of the Brahmaputra abounded in rhinos and were hunted whenever or wherever found. When the tea-gardens were first opened in Assam there were so plentiful that they were fired at from the houses of the pioneer planters.[53]The areas of Bengal adjoining Lower Assam, especially the Dooars also had plenty of rhinoceros. In the Sundarbans it was possible to seek the rhinoceros on foot; "*but quite apart from the extreme unhealthiness of those forests, that sport is attended by so many difficulties and discomforts, that it is not engaged in by other than the most enthusiastic sportsmen.*"[54] Gouldsbury, who spent forty years in Bengal noted that rhinoceros could only be hunted on elephants, either by beating in the ordinary way should the jungle be negotiable, or by going after them quietly in a pad elephant which was a more certain but a dangerous plan. The full-proof method of shooting rhinos was by aiming for the centre of the forehead or behind the shoulder; to hit any other part of the body could be dangerous.[55] The perils of the wilderness in fact made the sport of hunting even more attractive.

Bison Hunting:

The Indian bison is a misnomer for the gaur, as the bovid is not a bison in the true sense, although English game lovers preferred to call it the bison to glorify their hunts. Alexander Kinloch reported witnessing large herds of bison in the Dooars and the Assam valley. Bison had great trophy value and shooting bison was great sport. The gayal, mithan and the gouri-ghai of Assam, Chittagong and the Himalayan slope[56] was the same beast with minor differences.The animal in Bengal was largely confined to the north and very scarce in the Lower Provinces, so the sport was largely confined to the north.

Elephant Hunting:

The wilderness of Bengal was highly unpredictable, the abode of dangerous beasts, there was danger lurking in every turn and there was always the possibility of encountering a herd of wild elephants or worst still a solitary bull in *mast* or a rogue elephant. Captain Williamson commented

that it was a tough job shooting elephants in this part of the country. Shooting elephants for sport was prohibited by the Elephant Protection Act of 1879, elephants started to be caught alive in *kheddahs*, to be trained to be used in plantations, in the army and as beasts of burden. Elephants were caught but alive because the colonial state realized that the worth of a live elephant was greater than the joy of killing one for sport. Elephants were found in the wilderness between Sylhet and Chittagong, in many parts of Assam and the foothills of the Himalayas, they were also found in Manbhoom and Bankurah.[57]

The forests of Bengal had aptly been described as *nature's great menagerie*[58] because not only did it abound in big game; it was also the home of numerous smaller animals and birds. In its rivers and lakes, *jheels* and *bills* were found innumerable fish, presenting ample opportunities for angling, these water-bodies also teemed with migratory birds presenting excellent scope for bird hunting, in its rivers and *chars* were found alligators and crocodiles, venomous snakes were a menace causing immense loss to human lives and their livestock, so they too were killed, not for sport but as a necessity. All wild animals, birds, reptiles and even fish were killed either for sport, leisure or were sought to be exterminated to safeguard the interests of a regime interested in maximization of their income and profit.

Deer Hunting:

Deer was food for tigers and panthers and it was largely their destruction that was responsible for tigers and panthers preying upon domestic flock and herds and even men. Deer were so numerous at one point of time that it was not improbable to shoot half a dozen in one morning of stalking. Axis deer were found all over the country but there numbers were depleted steadily, the blame of which was placed squarely on the shoulders of the natives. Hog deer were plentiful and afforded excellent shooting from the *howdah*. The barking deer was essentially a habitant of the hills and forests but the noblest of all deer was the *bara singha* with the full grown stags sporting regal antlers and usually was found in the grasslands around marshes and lakes in Jalpaiguri, Maldah, Dinajpur and the Sundarbans. There were the sambhars and the nilghais, the gazelle and the four horned antler, which were chased on horseback and the hunt was facilitated by greyhounds that joined the chase to wear out the bucks.[59]

Hunting Exotic Fauna:

The higher reaches of the Himalayas had exotic fauna as the Himalayan brown bear and the red panda. These animals were mostly stalked on foot in the company of one or two local guides. The Himalayan country was also home to exotic avian life, the beautiful monal was found in the Darjeeling district and the foothills. The plumage of the bird was greatly sought after for its vivid colour and exceptional beauty.

Shooting Birds:

The English hunters revelled in the sport of shooting birds. The areas in the vicinity of Calcutta offered great opportunities for this sport. Baker commented that after hog-hunting and tiger

shooting snipe had afforded him the best and most certain sport in Bengal.[60] There were both jack and painted snipe here. Since snipes were mostly found in marshes and lowlands certain precautions needed to be taken before going for the shoot. It was important to guard the head against the heat of the sun, so wearing of a *sola* hat was recommended and to protect the feet from getting wet, it was advised to use good quality boots. Snipes were so numerous that it was not uncommon to bag twenty to thirty in one morning. Kanchrapara was the most famous ground for snipe shooting but Baker found a ground in Ranaghat still better, there were many places on both sides of the Hooghly river, and a place near Naihati that also offered very good sport.[61] The best time to shoot the birds was early morning and just before sun down. Bengal boasted of other big and small birds like the cranes, herons, jacanas, storks, black and white ibis, red shanks, whistling and cattan teals etc. Wild fowls of all kinds were plentiful in Bengal, *they congregate in thousands in the Chullan jheel in Rajshai and Pubna and on the chain of lagoons extending for fifty miles a league or two from and parallel with, the left bank of the Muddoomuttee river, which divide the districts of Jessore and Fareedpoor. The mallard the king of wild ducks was sometimes found in the Lower Provinces.*[62] To reach the birds in the lakes and *jheels* canoes were used, they used to be camaflouged by leaves and grasses, often a servant was taken to help the boatman in times of need. It was usual practise to take a second boat to pick up the wounded birds. Ducks were usually shot with duck guns or with 12 bore double guns.[63] However caution needed to be adopted in these waters as they harboured crocodiles. The crocodiles of the Sundarbans were the biggest and most ferocious; there was the *mugger* or *khumbir* and lastly the *gharial* or the Gangetic crocodile.[64] These too were shot, as the ferocity of these reptiles made them the ideal creatures sought to be exterminated by the English, killing them whetted the notion of the invincible white sahibs subjugating all evil that crossed their path.

ERADICATION OF 'VERMIN' AND SECURING OF LANDS AND LIVES

Bengal was infested with wild animals, the wild landscape had to be secured from vermin[65] and had to be converted to arable, and so what ensued was a protracted conflict between man and beast, in which the victory of man was only a pyrrhic victory. If sport hunting secured the objective of decimating the number of wild animals conceived as vermin, reward hunting brought further doom to them. The colonial state was adept at using ideology in addition to force to legitimize their actions and astute administrators that the English were, they kept devising ways and means to convince the Indians that their actions were all geared to help and secure the future of the latter. They took up the arduous task of gathering evidence on the depredations by wild animals thereby succeeding in legitimizing vermin eradication. In all this they were careful to project their image of the protector very convincingly. Since human life was considered to be the most precious of all lives that inhabited this earth, upholding it was most important and the colonial state professed to do just that. In the post 1857 period, when the task of consolidation of the Empire had begun in right earnest, the extension of agriculture featured very prominently in the colonial agenda but the state faced a major obstacle and this came from marauding beasts and venomous snakes. The first task was to gather statistics of the destruction caused by vermin and how they jeopardized the interest of men, so began the work of

the agents of the state to gather information and based on the same they embarked on the mission of vermin eradication by introducing reward hunting. In 1864 a resolution was passed in Bengal about what action was to be taken against vermin eradication. Here a reward on killing animals was categorically stated and the reward varied according to the intensity of the challenge faced. The below mentioned statement testifies to the same.

"Statement of the number of persons killed by wild animals and the number of wild animals destroyed in Bengal during the last six years.

Resolution His Honour the Lieutenant- Governor of Bengal, dated the 2nd
November 1866.

Rajshahye - In the districts of the Rajshahye Division, with the exception of Moorshedabad, tigers and leopards are numerous; but the Commissioner thinks that the number is decreasing, and considers the present scale of rewards quite high enough, unless where the death of a tiger is specially called for and he recommends that the reward in each case of this description should be raised to Rupees 25.

The Commissioner objects to the general distribution of arms among the people, as they do not know how to use them, but thinks that two shikarees on a salary of Rupees 5 each per mensem, with other advantages, might be employed in the districts of Rungpore and Dinagepore.

The Lieutenant - Governor approves of the proposal to grant a reward of Rupees 25 in each case when the special circumstances of the case render it a matter of very great importance that any particular tiger should be destroyed. The Commissioner should, however, first satisfy himself in each case that the ordinary reward is not sufficient, and that special circumstances exist which warrant the grant of special reward. Care must also be taken to ascertain that the tiger for which the special reward is offered has been killed, and that the body of another tiger has not been substituted.

The plan of employing paid shikarees of the destruction of wild animals has failed after more favourable circumstances than the Districts of Rungpore and Dinagepore would present for the caring out of the scheme, and it is not therefore considered advisable to try it in those districts.

Assam - In Assam the existing scale of rewards in sufficient, and on special measure are called for.

Nuddea - In the Nuddea Division the greatest number of deaths from wild animal occurs in the Sunderbuns and in the Jessorre districts, where special arrangements for exterminating dangerous animals are impossible, until such time as the forests and the jungle in the Sunderbuns are more cleared.

The Commissioner may be desired, if he has not already done so, to authorise officers, who move about the Sunderbuns to grant the prescribed rewards for the destruction of wild beast on the production of the heads.

Dacca - In the Dacca Division no special rewards are called for, as, owing to the gradual clearing away of jungle, deaths from wild animals are on the decrease.

Burdwan - The Districts of Burdwan, Howrah and Hoogly, in the Burdwan Division, are nearly free from wild animals; but in Bancoorah there are large tracts of woodland and jungle through which runs the high road to Juggernauth, whence numbers of people are said to be carried off by tigers.

The Commissioner should adopt measures to compel the owners of land along this road to keep it clear of jungle for 100 feet on each side of the road. The increase of the reward for each tiger killed from Rupees 5 to Rupees 10 is also sanctioned both for the Bancoorah District and for that of Midnapore.

Chittagong - In the Chittagong Division also the existing rate of rewards is sufficient; but the Commissioner should be told that it is the duty of the Magistrate to keep the returns of deaths caused by wild animals, and of the number of wild animals killed, and to see that the Police are careful and precise in furnishing information under both heads.

It should be suggested to the Commissioners generally that strychnine might be used with advantage and without risk in call cases where a tiger takes up his abode near a village and preys upon the people for their cattle. The poison might be introduced into the body of a cow or other animal after it has been killed by the tiger but it should only be so used by the Police, or at least under their orders and immediate supervision.

ORDER - Ordered, that a copy of this Resolution be forwarded to all Commissioners, to the Accountant General of Bengal, and to the Inspector General of Police."[66]

The above resolution is a clear indication of the threat faced from wild animals in the various divisions of Bengal and even Assam and the measures taken to ensure vermin eradication. The extract also reveals the exact extent of the wild landscape converted into arable and the districts which could boast of being freed from the menace of wild animals. In the fight for survival the wild animals suffered greater casualty. The 1880s witnessed a further intensification of the assault, the more the jungles were cleared the greater was the loss of habitat suffered by the wild animals which in turn aggravated the man-animal confrontation.

"From F.B. PEACOCK, Esq,

Chief Seretary to the Government of Bengal,

To THE SECRETARY TO THE GOVERNMENT OF INDIA,

HOME DEPARTMENT.

Darjeeling, {dated the 14th September, issued the 14th September)1885.

JUDICIAL.

SIR,

I AM directed to submit, for the information of the Government of India, the accompanying statement showing the results of the measures adopted in the Lower Provinces for the destruction of wild animals and venomous snakes during the year 1884.

2. The statement shows that the total number of persons killed by wild animals and snakes is higher than the number killed in any of the three preceding years, but less than that in 1880. The subjoined table gives the figures for the past five years.

The Chittagong Division shows the least number of deaths (188). Of the ten deaths reported during the year in Calcutta and the suburbs, nine were caused by snakes and one by a jackal. There was an increase in the number of deaths in seven, and a decrease in the remaining two division of Bengal.

3. There was also an increase in the number of cattle killed during the year as compared with the figures for 1883; the total number killed being 12,397 against 11,710 in 1883. The Presidency Division shows the largest number of deaths (4,135). There was an increase in the number of deaths in six, and a decrease in the remaining three divisions of Bengal. The increase was greatest in the Presidency Division, where the figure rose from 3,833 in 1883 to 4,135 in 1884. As in the year 1883, leopard and panthers caused the largest number of deaths of cattle (5,799).

In the district of Nuddea alone, the number destroyed by these animals amounted to 2,842 against 2,718 in 1883. Last year the attention of the Commissioner of the Presidency Division was drawn to the large number of deaths caused by these animals, and he was asked to take some steps to reduce a destruction which was rapidly assuming the proportions of a scourge. He has reported that he has in consultation with the Magistrate of the district doubled the rates of rewards for the destruction of these animals, and he hopes that this will have the desired effect. During the year under review, tigers and wolves are reported to have killed respectively 5,033 and 531 cattle, while only 308 are reported to have been killed by snake-bite.

4. The number of wild animals destroyed shows a satisfactory increase from 5,867 in 1882 and 5,653 in 1883 to 6,906 in 1884. The Rajshahye Division shows the largest number of animals killed (1,762); in Dacca Division the least (236). In Calcutta 570 sharks were captured and killed against 583 in 1883. There was an increase in the number of animals destroyed in six, and a decrease in the remaining three division of Bengal. The increase was greatest in Rajshahye Division, where the figure rose from 777 in 1883 to 1,762 in 1884. The district of Rungpore alone added 937 to the increase, the other districts showing no marked difference. The increase in Rungpore is reported to be due to prolonged exertions of professional shikarees, who have taken to visit the district of late years. Of the wild animals, only one leopard is reported to have been killed in the district of Darjeeling, and the Deputy Commisioner remarks, --- “the number of wild animals shown in the return as having been killed during the year does not represent the actual number killed, as the European planters kill a large number every year, and no rewards are claimed nor information given to the police of these kills”. These remarks apply more or less to most districts. In the Bhagulpore Division, the number of animal destroyed rose from 561 in 1883 to 1,043 in 1884. The number of tiger destroyed in the division was 64 as against 24 in 1883 of these the districts of Bhugalpore and Maldah contributed 28 and 27 respectively against 8 and 8 in 1883. The Magistrate of Maldah reports that a largely increased number of palisaded enclosure traps have been constructed in his district.

5. As to special measures adopted for the extermination of wild animals, an extra reward has been sanctioned for the destruction of tigers and tiger cubs in the Sunderbun forests, in addition to authorised reward payable by district officers. This accounts for the increase in the number of tigers destroyed during the year in the district of 24 Pergunnahs. In Nuddea, as was pointed out before, the rates of reward for the destruction of leopards and panthers have been doubled with a view to encourage the destruction of these animals. In Rajshahye Division, excepting the grant of 50 licenses in Form XI under the arms act to the ryots of the Burdhunkotee estate in Rungpore for the destruction of pig and other wild animals which injure the crops, no special measure were adopted in any district for the destruction of wild animals and venomous snakes. No zamindars, talukdars, farmers & c., of

any district of the division adopt any special measures for the destruction of wild animals, though a few zamindars of Dinagepore killed some tigers and leopards for sport. As leopard were reported to cause great havoc in the sub- division of Kissengunge in the district of Purneah, the rate of reward for their destruction has been raised as an experimental measure, from Rs.5 to Rs.10, and a special reward of Rs. 20 has been allowed for any leopard that had destroyed human life. No other special measures were adopted in the district of the Bhagulpore Division for the destruction of wild animals, but the orders regarding the prompt payment of rewards and the facilities to be afforded to cultivators and others for obtaining licenses under the Arms Act have been widely promulgated.

6. The number of snakes shown in the return as destroyed during the year under report is 51,787 against 38,856 in 1883, and 32,187 in 1882. The Dacca division shows the least number of snakes killed (454). There was an increase in the number of snakes in six, and a decrease in the remaining three divisions of Bengal. In the Presidency Division the total number of snakes destroyed was 5,908 as compared with 4,419 in 1883. The largest number was killed in the district of Nuddea, where the number amounted to 2,270 in the previous year. In the Rajshahye Division the number of snakes killed was 659 as compared with 793 in 1883. The disproportion between the number of snakes destroyed and the amount of rewards paid in the Division is, as in previous year, ascribed to the fact that people residing at a distance do not care to come to the sudder station for the sake of a small reward. There are no professional snake-killers in any districts of the Division. The returns for Calcutta and the suburbs are blank, so is also the return for the Gurjhat mehals. In the districts of Dinagepore and Darjeeling only one and four snakes respectively were killed. In Burdwan, Rungpore and the Chittagong Hill Tracts, where 34, 80, and 40 snakes respectively were killed, no rewards were given for their destruction, apparently because none were claimed.

7. It appears from the local returns that rewards for the destruction of snakes were offered by municipalities in all the Divisions of Bengal. In the Burdwan Division, the Bancoora, Bishenpore, Tumlook, Ghattal, and five other municipalities paid rewards amounting to Rs. 91-2 against Rs.48-6-6 in 1883. In the Presidency Division, rewards amounting to Rs. 287-4 were paid from municipal funds in the districts of 24- Pergunnahs, Nuddea, Moorshedabad and Khoolna. In the Rajshahye Division, the Dinagepore, Rampore, Beauleah, Pubna, Serajgunge, Bogra, and Sherepore municipalities paid rewards amounting to Rs. 38, as against Rs.33-10 in the preceding year. No other municipalities of the Division any rewards as none were claimed, and the two municipalities in Darjeeling are free from poisonous snakes. In the Dacca Division, rewards aggregating Rs.20-10 were paid by municipalities, as against Rs. 25-11 in 1883. Rs. 9-8 were paid by the municipalities of Commillah, Brahmanberiah and Cox's Bazar in the Chittagong Division, as against Rs. 13-8 in 1883.

8. The total amount paid in rewards was Rs. 42,374-11 against Rs. 27,976-6-3 in 1883. Of this sum, Rs 32,293-8-6 were paid for the destruction of wild animals, against Rs.20880-12 in 1883. The difference is chiefly due to the large number of tigers killed during 1884, and the consequent increase in the amount paid as rewards for their destruction, the figures under this account having risen from Rs. 7,532- 8 in 1883 to Rs. 15,367-8 in 1884. The largest expenditure on account of rewards for the destruction, of wild animals was incurred in the Rajshahye Division, where a sum of Rs.10, 035-8

was paid in 1884 against Rs. 1,937- 12 in 1883. No reward was paid for the destruction of wild animals in the suburbs of Calcutta, or in the districts of Burdwan, Beerbhoom, and Noakholly.
I have the honour to be,
SIR,
Your most obedient servant,
F.B PEACOCK,
Chief Secretary to the Govt of Bengal."[67]

"FROM H.J.S COTTON,ESQ, C.S.I,
Chief Secretary to the Government of Bengal,
To THE SECRETARY TO THE GOVERNMENT OF INDIA,
HOME DEPARTMENT.
Dated Calcutta, the 4th July, 1895.

JUDICIAL
Sir,
I am directed to submit herewith the annual report on the measures adopted in the Lower Provinces for the destruction of wild animals and venomous snakes for the year 1894, together with the annual statements giving the figures which are dealt with in the report.
2. Persons killed by wild animals.—The total number of persons reported to have been killed by wild animals in 1894 is 1,693, against 1,600 in 1893. The number of persons killed by elephants fell from 36 to 30 and the number by tigers, from 422 to 373. In the Presidency Division there was a decrease in the number of deaths reported to have been caused by tigers, the figures being 14 as against 26 in 1893. As usual, these deaths occurred in the two Sunderbans districts of the 24- Parganas and Khulna only. Alligators were very destructive in all the districts of the Dacca Division, the number of deaths being 168 against 80 in 1893.
3. Cattle killed by wild animals.—35,519 head of cattle are reported to have been killed by wild animals in 1884 against 35,623 in 1893.
4. Wild animals killed — The total number of wild animals killed fell from 5,536 to 4,362, the decrease being shared by all the divisions, except Chota Nagpur. The number of tigers, leopards, and bears destroyed rose from 236,890 and 174 to 271,931 and 191, while the number of wolves, hyenas, and "other animals" fell from 828,543 and 2,859 to 492,388 and 2,084. 49 tigers and 90 leopards are reported to have been destroyed in the Presidency Division, against 30 and 51, respectively, in 1893. The districts where most tigers were killed by men and most men by tigers are noted on the margin.
5. Rewards paid — The total amount paid in rewards for the destruction of wild animals in 1894 was Rs. 14,146, against Rs. 14,845 in 1893. In the Dacca Division a sum of Rs. 763 was paid, as against Rs. 1,421 in 1893. It is disappointing to find that the extension of facilities afforded by Government viz., the grant of rewards at subdivisional head-quarters, has not led to an increase in applications for rewards.

6. Mortality from snake-bite.—The number of deaths among human beings and among cattle reported to have been due to snake- bite fell from 10,797 and 725 in 1893, to 9,856 and 462, respectively, in 1894.the decrease is attributed to the absence of floods during the year. It will be seen from the statement annexed that the largest number of deaths by snake- bites occurred in Nuddea (493) and Midnapore (480). In the whole Dacca Division the number of deaths by snake-bite was 690, and in the Chittagong Division only 160. The statistics show that it is not in those districts where jungle abounds about and around the houses that the mortality is greatest." [68]

"No. 70 J – D

FROM C.W.BOLTON, ESQ, C.S.I,

Chief Secretary to the Government of Bengal,

TO THE SECRETARY TO THE GOVERNMENT OF INDIA,

HOME DEPARTMENT.

Dated Darjeeling, the 6th May 1899.

JUDICIAL.

SIR,

I AM directed to submit herewith in the prescribed form the annual report and return for the year 1898 on the measures adopted in the Lower Provinces for the destruction of wild animals and venomous snakes.

2. Persons killed by wild animals: – The total number of persons reported to have been killed by wild animals during the year 1893 was 1,762 against 2,210 in 1897. The decrease is shared by all the Division except Chittagong. The total for 1897 was abnormal, and the figure for the present year approximates to those of the preceding years, though showing some increase. There is no reason, however, for supposing that any real increase has occurred in the mortality from wild animals, and it may be presumed that the slightly increased figure is the result of more accurate registration of vital statistics generally. Tigers are made accountable for 439 deaths against 430 in the previous year. The 24 Parganas and Khulna each report 30 deaths. Leopards are reported have to caused 166 deaths throughout the province. Some officers believed that deaths are attributed to tiger which should be put down to leopards, while others are of the opposite opinion. The same words are used indiscriminately in the vernacular to denote both animals and it is impossible always to distinguish. Elephants account for 14 deaths, bears for 48, wolves for 64, and hyenas for 7, while the head "Other animals "shows 1,024. The great majority of deaths falling under the last head appear attributable to jackals. The magistrate of Nadia draws attention to this and suggests that the deaths due to jackals might be separately shown in the statement appended to the report. The mortality from jackals is undoubtedly far greater than that from either bears or hyenas, the figures for which are separately shown, and the suggestion appears worthy of consideration. In Nadia 75 out of 80 deaths shown under these head, and in the Rajshahi Division 67 out of 84 were due to jackals. Alligators account for a large number of the remaining deaths under this head.

3. Cattle killed by wild animals:-- The total number of cattle killed by wild animals is returned as 28,408 against 28,533 in 1897, a decrease having occurred in the Chittagong Division. Next comes Rajshahi with 4,995 head killed. No great reliance can, however, be placed on the figure.

4. Wild animals killed.—The total number of wild animals killed during the year was 9,275 against 6,685 in 1897. Out of this total the two districts of Backergunge and Faridpur alone are credited with 4,150. The increase in Backergunge is remarkable – from 275 in 1896 to 1,083 in 1897 and 2,685 in 1898. It may be attributed, as was mentioned in the report for 1897 to the system under which Government guns, with ammunitions, have been entrusted to the panchayets for the protection of their fellow villagers against wild animals. The bulk of animals killed were pigs, which constantly damage crops. In some districts jackals as well as pigs have been included in the returns.

5. Rewards paid for the destruction of wild animals.—the total amount paid in rewards for the destruction of wild animals was Rs 11,750-7 against Rs. 16,635-12 in 1897. The largest expenditure was incurred in the districts of Hazaribagh, and Mymensingh. As usual, the amount paid on account of tigers was greater than that paid for any other kind of animals, Rs. 5,475 or nearly half the total amount of rewards having been so expanded. It appears that in some municipalities rewards are paid for jackals, and in view of the large mortality reported as due to these animals, there seems good reason for that course.

6. Mortality from snake-bite — Next come the Presidency Division with 1,702, and the Rajshahi Division with 1,512 deaths. The Chittagong Division returns the lowest mortality, showing only 177 deaths.

7. Snakes killed and rewards paid.—The total number of snakes killed rose from 28,277 to 36,745, while the amount of rewards paid fell from Rs. 573-1-6 to Rs. 546-8. In the Presidency Division 8,355 snakes are shown as killed. Accuracy in these figures cannot, however, be expected private individuals being under no obligations, and except in municipalities, where rewards are still paid, having no incentive, to report, while the village officials have no means of obtaining complete information.

8. Clearing of Jungle and undergrowth.—Action is reported to have been taken in some municipalities to remove rank under growth where it was considered obnoxious either from a sanitary point of view or as affording shelter to venomous snakes. The desirability of taking such measures within municipal areas seems to be generally appreciated, much cannot be done in the villages, as the people prefer the privacy which their homestead derive from surrounding jungle to protection from snakes.

9. License for arms for destroying wild animals.—The number of license issued in from XI during the year was 407 against 302 in the previous year. The total number in force was, however, less than in the preceding year, being 1,806 against 2,188. The reduction occurred mainly in the 24 Parganas and Khulna Districts of the Presidency Division. Since the disarmament of Backergunge in 1896, no license in Form XI have been granted in the district. The number of wild animals killed, however, shows that good use has been made of the Government smooth-bores and ammunition entrusted to the panchayats. The guns are used by professional shikaris under authority granted by the District Magistrate. The number of such shikaris was increased from 336 to 395 during the year.

I have the honour to be,

SIR,

Your most obedient servant,

C.W.BOLTON,
Chief Secretary to the Govt. of Bengal."[69]

The twentieth century saw the unabated continuation of the man-animal conflict. Where the existence of wild animals was totally wiped out because of the unflinching resolve of the state to wipe out vermin, the practise of reward hunting was discontinued only to be resumed if the threat factor returned. It was a protracted war against wild animals and the assault on them persisted even at rhe turn of the century.

"FROM C.E. BUCKLAND, ESQ,C.S.E,
Offg. Chief Secretary to the Government of Bengal,
TO THE SECRETARY TO THE GOVERNMENT OF INDIA,
HOME DEPARTMENT.
Dated Calcutta, the 1st May 1901.
JUDICIAL.
SIR,
I AM directed to submit the annual report on the measures adopted in the Lower Provinces for the destruction of wild animals and venomous snakes for the year 1900, together with the prescribed return containing statistics relating to wild animals and venomous snakes for the year.
2. Persons killed by wild animals.—The total number of deaths among human being attributed to wild animals was 1,728 against 1,632 in 1899. The number of deaths caused by tigers rose from 446 to 474. The two Sunderban districts of the 24- Pargans and Khulna account for 74 out of 75 deaths occurred in the Presidency Division. The district of Bckergunge returns 21 deaths from tigers against 4 in 1899. The magistrate is of the opinion that several of the deaths were by leopards.
One hundred and sixty-eight persons are reported to have been killed by leopards against 173 in 1899. The Presidency Division shows a marked increase in the number of deaths caused by these animals.
3. Cattle killed by wild animals.—Twenty- seven thousand five hundred and sixty- eight head of cattle are reported to have been killed by wild animals against 29,624 in the previous year, the decrease being shared by all the Divisions, except Patna, Bhagalpur, and Orissa. In the Rajshahi Divisions the number of deaths of cattle from wild beasts is still large.
4. Wild animals killed.—the number of wild animals killed fell from 7,608 to 5,235, there being a decrease under all the specified heads and a decrease in all the Divisions, except the Presidency and Orissa. The total number of tigers killed fell from 356 to 215. The Dacca Division, in which 24 tigers are shown to have been destroyed in 1900 against 178 in 1899, was mainly responsible for the decrease. A noticeable decrease also occurred in this Division in the number of leopards destroyed, the figures for 1900 and the preceding year being 117 and 247 respectively.
5. Rewards paid for the destruction of wild animals. – The total amount paid in rewards for the destruction of wild animals was Rs.7,642-8 against Rs.11,671 in 1899. As usual the amount paid on account of tigers was greater than that paid for any other kind of animal. Compared with the statistics of 1899, the Burdwan and the Rajshahi Divisions show a decrease in the number of wild animals killed and an increase in the amount paid in rewards. In the district of Burdwan no reward was

applied for in regard to some animals killed. In Bankura a special reward of Rs.100 was paid for the destruction of one elephant, and in Uluberia subdivision of the Howrah district Rs.50 for the killing of a destructive alligator.

6. Mortality from snake-bite.—Ten five hundred and fifty- seven persons and 832 head of cattle were reported to have been killed by snakes in 1900 against 12,220 and 915, respectively, in 1899. In the whole Dacca Division the number of deaths from snakebite was 701 and in the Chittagong Division only 142.

7. Snakes killed .—The total number of snakes reported to have been killed fell from 37,289 to 28,918 and the amount of rewards paid from Rs. 622-5-6 to Rs. 315-13. The decrease in the number killed is, however, more apparent than real; for, as rewards are no longer paid except within municipal limits, the numbers killed are not reported. In the district of Bankura no snake was returned as destroyed in the past two years. The Commissioners propose that the figures for snakes killed may be altogether omitted from future returns, as accurate information on this point cannot be expected.

8. Clearing of jungle. – The orders as to the clearance of jungle in the neighbourhood of dwelling-houses have been given effect to by district officials as far as practicable in towns and villages.

9. Licenses for arms for destroying wild animals. – The number of licenses issued in Form XI rose from 263 to 408 and the number in force during the year from 1,500 to 1,908. In the Burdwan Division 24 licenses were issued against none in 1899, and in the Dacca Division 45 against 2 in the previous year. The 37 licenses which issued in the district of Dacca were originally in Form VIII.

I have the honour to be,

SIR,

Your most obedient servant,

C.E. BUCKLAND,

Offg.Chief Secy. to the Govt. of Bengal."[70]

"GOVERNMENT OF INDIA

Simla, the 23rd September 1905.

RESOLUTION.

The total mortality amongst human beings reported to have been caused by wild animals in 1904 was 2,157 against 2,749, in 1903.

2. The destruction of human life by tigers in 1904 was smaller than in the previous year, the number being 786 against 866. As usual the greatest mortality occurred in Bengal. From Khulna an increased mortality is reported and a slight rise is noticeable in the returns from Backergunge, consequent, it is reported, on the opening up of the Sundarbans.

3. The mortality from snake-bite rose from 21,827 in 1903 to 21,880 in 1904. The number of deaths in 1904 reported from Bengal was 10,052, representing a proportion of .13 per 1,000 of the population.

4. The number of cattle destroyed by wild animals rose from 86,232 in 1903 to 88,206 in 1904, and the number killed by snakes from 9,994 to 10,376. Of the former total the number destroyed by tigers

amounted to 28,093; by leopards to 42,812; by wolves to 9,984; by hyenas to 2,580; and by other animals to 3,409. In Bengal, where the destruction was greatest (23,506), the highest mortality occurred in Palamau, Hazaribagh, Backergunge and Dinajpur.

5. The number of wild animals destroyed during the year 1904 was 16,122 against 16,318 in 1903. The number of tigers, leopards, bears, wolves and hyenas destroyed was 1,335, 4,371, 2,127, 1,822 and 497 respectively. The rewards paid for the destruction of wild animals amounted to Rs. 1,07,033. The total number of snakes killed in 1904 was 65,378 against 62,745 in 1903, and the rewards paid for their destruction amounted to Rs.2,727 against Rs. 2,827 in 1903.

6. The number of licenses (in Form XI) issued free of cost under the Indian Arms Act 1878, for the destruction of wild animals or the protection of crops during 1904, was 8,489 against 7,953 in 1903, and the total number of licenses of this nature in force in 1904, including such as were valid from previous years, amounted to 37,720 as compared with 37,680 in 1903.

H.H.RISLEY,

Secretary to the Government of India."[71]

Bengal was divided in 1905 into the Provinces of Bengal and Eastern Bengal and Assam, many districts of linguistic Bengal were incorporated into the new province of Eastern Bengal and Assam, the coversion of the woodlands and destruction of vermin was carried on unhindered in the new territorial entities.

"FROM

J.E.WEBTER, ESQ.,I.C.S.,

SECRTARY TO THE GOVERNMENT OF ESTERN BENGAL AND ASSAM,

TO

THE SECRTARY TO THE GOVERNMENT OF INDIA,

HOME DEPARTMENT.

Shillong, the 1st May 1907.

SIR,

I AM directed to submit the annual report and the prescribed return relating to the mortality caused by wild animals and venomous snakes and the measures adopted in Eastern Bengal and Assam for their destruction during the year 1906.

2. The statistics received show that 352 persons were killed by wild animals as against 369 in 1905. The gradual decrease noted last year is therefore maintained. Bakarganj, where 114 deaths occurred, is by far the most dangerous district, Rajshahi and Nowgong coming next, with 23 and 21 casualties respectively. In 1905 the cases reported from Bakargunj were 92 in number, and the increase is solely due to crocodiles, which caused 85 deaths, against 52 in the preceding year. This heavy mortality is traced to the subdivision of Patuakhali and particularly to the thana of Amtali situated therein, which alone accounts for 18 and 33casualities, respectively, from tigers and crocodiles. The explanation is the same as that furnished in the report of the previous year, namely, a gradual extension of cultivation in the Sunderbans. For the province as a whole, the casualities from elephants, tigers, leopards and "other animals", chiefly wild bears and crocodiles, remain remarkably constant with the figures reported in 1905, the net result being a decrease of seventeen. The number of persons who

died from snake bite was 2,730, as against 2,363, an increase of 367. This increase is marked in the Dacca and Rajshahi divisions, and is universally explained by the prevalence of excessively high floods, which drove reptiles to take refuge on high-lying homestead lands.

The number of cattle killed by wild animals and snakes fell from 19,572 to 18,317. The heaviest losses are reported from the districts of Kamrup and Darrang in the Assam Valley, which together account for more than one –third of the aggregate casualties.

3. The Commissioner of Rajshahi again reports considerable mortality from jackals. Thirty-eight children are stated to have been carried off and nine persons to have died of hydrophobia after being bitten by one of these animals. Statistics relating to jackals have so far as possible been excluded from the statement, but some cattle killed by jackals appear to be included among those shown as killed by other animals in Kamrup.

4. The number of wild animals killed again fell from 5,773 to 4,742. The most notable district variation was in Backarganj, where 304 fewer animals were killed than in 1905; the remaining decrease is distributed more or less evenly over the whole province. The number of tigers killed rose from 449 to 471, while statistics of the destruction of leopards and bears show a considerable falling off. But the number of bears killed in 1905 in the Lushai Hills was certainly abnormal. Six thousand one hundred and thirty-four snakes were killed, as against 7,580 in 1905, and the amount paid in rewards for their destruction fell from Rs.815 to Rs.590. Sylhet was again the only district in which the destruction of these reptiles was largely effected or regularly reported, or any substantial sum expended.

5. The number of licenses in Form XI held under the Indian Arms Act, 1878, for the destruction of wild animals and the protection of crops, rose from 1,372 in 1905 to 5,236 in the year under review.

I have the honour to be,

Sir,

Your most obedient Servant,

J.E WEBSTER,

Secy. to Govt. of Eastern Bengal and Assam."[72]

"FROM H.C. STREATFEILD, ESQ., I.C.S,

Off g. Secretary to the Government of Bengal,

To THE SECRETARY TO THE GOVERNMENT OF INDIA,

HOME DEPARTMENT.

SIR,

I AM directed to submit herewith the annual report and the prescribed return relating to the

mortality caused by wild animals and venomous snakes, and the measures adopted in Bengal for their destruction during the year 1906.

2. Persons killed by wild animals. – The number of persons killed by wild animals fell from 808 in 1905 to 756 in the year under report. Elephants were responsible for 18 deaths as against 9 in 1905. Of these seven occurred in the Darjeeling district. In consequence of a report submitted by the

Commissioner of Bhagalpur regarding the depredations of wild elephants in the Darjeeling district, this Government has approved a form of license and agreement for the capture of these animals. The number of deaths caused by tigers fell from 390 in 1905 to 295, the decrease being shared by all the Divisions except the Presidency and Bhagalpur. The mortality caused by the tigers was highest in the Khulna district, where 58 persons were killed as compared with 57 in 1905. There was also a slight increase in the 24- Parganas, the cause of which has not been explained. As regards the total number of deaths caused by leopards, bears, wolves and hyenas, the statistics show little variation from those of last year. The increase in the figure of the Purnea district is most noticeable. Purnea returned 38 deaths against 19 in 1905.

3. Rewards paid for the destruction of wild animals and snakes.— The amount paid in rewards for the destruction of wild animals and snakes were Rs. 6,166 and Rs. 306, the corresponding figures for 1905 being Rs. 6,173 and Rs. 302.

4. Efforts are still being made to carry out of the orders regarding the clearance of jungle in municipal areas.

5. License for arms for the destruction of wild animals.— The number of free license for firearms in Form XI of the Indian Arms Act issued during the year rose from 2,214 to 2,223. Of these 236 were fresh licenses.

I have the honour to be,
SIR,
Your most obedient servant,
H.C. STREATFEILD,
Off g. Secy. to the Govt. of Bengal."[73]

"RESOLUTION.

The total number of persons reported to have been killed by wild animals in 1906 was 2,084 as against 2,051 in 1905.

2. In 1906, 22,854 persons are reported to have died from snake bite as against 21,797 in 1905.

3. The total number of cattle destroyed by wild animals during the year was 86,467 as against 92,709 in 1905. As usual leopards and tigers were much more destructive than other animals and killed 41,768 and 28,714 cattle respectively. There was a large increase in the destruction caused by wolves in Bengal, and by leopards in Eastern Bengal and Assam; and by hyenas in Eastern Bengal and Assam.

H.A STUART,
Off g. Secretary to the Government of India."[74]

"FROM
THE HON'BLE MR. J.F. GRUNING, I.C.S.,
SECRETARY TO THE GOVERNMENT OF EASTERN BENGAL
AND ASSAM, REVENUE AND GENERAL DEPARTMENT,
TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,
HOME DEPARTMENT.
Shillong, the 20th April 1911.
SIR,
I AM directed to submit the Annual Report on the mortality among human beings and cattle caused by wild animals and venomous snakes and on the action taken during the year 1910 for the destruction of these creatures together with the prescribed statement.
2. Three hundred and seventy nine persons are reported to have been killed by wild animals, a figure which is only slightly in excess of the average such casualties for this Province in the years 1904-1908, and constitutes a welcome reversion from the exceptional death-roll of 546 in 1909. The most striking feature was the decline in the number of deaths caused by wild boars from 126 to 50; leopards, tigers and crocodiles also claimed considerably fewer victims than 1909.
3. Deaths caused by jackals have, as usual, been omitted from the statement; the Dacca and Rajshahi Divisions however report 45 and 41 such deaths, respectively, the majority being infants, but 12 cases in the latter Divisions are specifically attributed to the bites of rabid animals, while no less than 197 cattle are said to have been killed in Kamrup by mad jackals and 27 in Nowgong. With a view to check rabies a special rate of Rs. 4 per head for the destruction of jackals in the vicinity of Shillong has been in force since the beginning of 1909.
4. Deaths from snake bites show a regrettable continuance of last year's rise; the total of 2,915 is the highest since 1902, and in consequence the provincial total of human casualties, 3,294, is also the highest recorded since that year, presenting a marked contrast with the total of 1,974 recorded in 1908. The Dacca and Rajshahi Divisions, as usual, return the bulk of such deaths, the districts of Dacca, Faridpur, Mymensingh, and Pabna showing marked increases; in Sylhet alsothe number of deaths rose from 36 to 76, and there was a general increase in the districts of the Chittagong Division. This unfortunate increase has, His Honour thinks, been rightly attributed to snakes being driven by high floods to take refuge in the raised village sites.
5. The mortality amongst cattle maintains the welcome decline commented on the last year's report as a feature of the decade, though snakes are reported to have been responsible for 323 deaths against 255 in 1909. Chittagong, Jalpaiguri, Malda, and Sylhet all show increases but in the Assam valley districts, where the death-roll is always highest, the Commissioner reports a decrease to 10,977 from 11,146 in 1909 and 11,617 in 1908; the district of Goalpara returned only 929 casualties against 1,439 in 1909. Wild dogs however were responsible for 559 deaths as against 486 in 1909.
6. There was a marked fall in the number of animals killed, the total of 3,659 being the lowest recorded in the Province during the current century, though the amount paid in rewards compares more than favourably with most previous years.There was a general decrease in the number of leopards, tigers and bears killed. Wild pigs fell from 2,498 to 1,914; as the figures for human casualties from these animals have also declined conspicuously.
7. The number of snakes killed rose from 4,050 to 6,991, and the rewards paid exceeded Rs. 1,000 for the first time since 1902. For both these increases the district of Sylhet is almost entirely

responsible, returning 3,643 snakes killed and Rs. 806-4 paid in rewards against 735 snakes and Rs.7-8 in 1909.

8. The number of licenses in force under the Indian Arms Act in Forms XVI, XVII and XVIII shows a slight decline, though there was an increase over last year's figures in the number of licenses granted during the year, consequent on the withdrawal of the exemption previously enjoyed by certain subordinates of the Police and other departments, and the licensing of weapons held by persons who had hitherto erroneously considered themselves exempt as being East Indian subjects of His Majesty.

I have the honour to be,

SIR,

Your most obedient servant,

J.F.GRUNING,

Secretary to Government."[75]

"From – J.G.CUMMING, ESQ.,I.C.S., Secretary to the Government of Bengal,

Revenue Department,

To – The Secretary to the Government of India, Home Department.

I am directed to submit herewith the annual report and the prescribed return relating to the mortality caused by wild animals and venomous snakes and the measures adopted in Bengal for their destruction during the year 1910.

2. Persons killed by wild animals. -- The increase in the number of persons killed by wild animals, from 1,004 in 1909 to 1,130 in 1911, occurred chiefly in the Presidency Division, where the number of deaths caused by tigers increased from 57 in 1909 to 126 in the year under report; of these Khulna alone contributed 80 and 24- Parganas the rest. Man-eating tigers were more aggressive in the Sundarbans portion of the Khulna District, and 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 1909; the result was a diminution of their natural food supply and the greater inducement to attack human beings. The Commissioner of the Presidency Division has been requested to consider what measures should be adopted to lessen the existing evil. The total number of deaths under this head for the whole province rose from 383 to 449. The number of deaths caused by wolves rose from 167 to 218, a marked increase from (58 to 130) having occurred in the district of Darbhanga.

3. Persons killed by snakes.—The number of persons reported to have died from snake bite was 7,767 as against 7,202 in 1909. The increase is particularly noticeable in the Presidency Division. The number of persons stated to have been killed under this head in the Burdwan Division is less by 236 than the number killed last year; this decrease is attributed to the absence of serious floods, which usually drive snakes to enter human habitations, and to the measures adopted for clearing jungle.

4. Cattle killed by wild animals.—It is reported that 22,348 head of cattle were killed by wild animals as against 23,624 in 1909: the decrease is shared by all the Divisions except Patna.

5. Wild animals destroyed.—The total number of wild animals reported to have been destroyed during the year under report was 1,785 as against 1,427 in the preceding year. The number of wolves and tigers killed rose from 160 and 116 in 1909 to 235 and 157 respectively in 1910.
6. Rewards paid for the destruction of wild animals and snakes.—The amounts paid in rewards for the destruction of wild animals and snakes were Rs. 13,747-3-0 and Rs. 133-7-0 respectively: the corresponding figures for 1909 were Rs. 9,631-15-6 and Rs. 170-14-0.
7. Licenses for arms for the destruction of wild animals.—The number of licenses for fire arms in Form XVI, XVII, and XVIII of the Indian Arms Act, which were in force during the year under report, numbered 29,406; of these 2,846 were fresh licenses." [76]

Simla, the 19th August 1912.
"RESOLUTION
The reports received from the various provinces show that one thousand nine hundred and forty-seven persons were killed by wild animals in British India during the year 1911, a figure considerably less than the number reported in the previous year, namely 2,382. The inhabitants of Bengal continued to be more exposed than those of any other province to the ravages of wild beasts. In this province, although the number of deaths reported was considerably less than in 1910, no less than 905 persons met violent deaths of this nature.
As usual, tigers were responsible for considerably more deaths than any other animal (though it appears from the reports that they are frequently credited with deaths which are in fact caused by leopards), and for more deaths in Bengal than in any other province. In Bengal they claimed 385 of the 905 people killed by animals of all kinds, while 112 of these 385 were killed in the Orissa Division. A party of professional hunters accounted for no less than 70 tigers in the Kamrup district in Assam, with the result that only one death occurred in that district, as compared with 12 in the previous year. Though the ravages of wolves in certain Bengal districts showed considerable diminution, these animals were responsible for 77 deaths in the Darbhanga District.
Apart from the deaths caused by tigers and wolves, leopards are shown as having killed 249 persons, and elephants 48. Over 500 deaths are also reported under unclassified head, "other animals"." [77]

"FROM H.F.SAMMAN, E.S.Q, I.C.S.,
Officiating Secretary to the Government of Bengal,
TO THE SECRETARY TO THE GOVERNMENT OF INDIA,
HOME DEPARTMENT.
SIR,
I am directed to submit herewith the annual report and the prescribed return relating to the mortality caused by wild animals and venomous snakes, and the measures adopted in Bengal for their destruction during the year 1912.
2. Persons killed by wild animals.—There was a slight decrease in the total number of persons killed by wild animals, the figure for the year under report being 408 as compared with 431 in the previous year. The decrease is shared by all the divisions except Burdwan and Rajshahi, where the figures

were 30 and 94 against 23 and 74 respectively in the preceding year. There was also a slight decrease in the total number of deaths caused by tigers, the figures for the year under report being 117 against 139 in the preceding year. The decrease was most noticeable in the Chittagong where the number fell from 13 to 5. This is ascribed to the destruction of a man-eating tiger near Feni.

3. Persons killed by snakes.—There was a considerable decrease in the number of persons reported to have died from snake-bite, the number being 4,471 against 5,089 in 1911. The decrease is shared by all the divisions, except Burdwan, where the figures show a slight increase. In the Dacca Division, where the decrease was greatest, it is attributed to the absence of high floods which usually drive snakes to take shelter in human habitations.

4. Cattle killed by wild animals.—It is reported that 4,950 head of cattle were killed by wild animals and 276 by snakes in the preceding year. The increase occurred in the Presidency, Rajshahi and Chittagong Divisions.

5.Wild animals destroyed.—There was a slight rise in the total number of wild animals reported to have been destroyed during the year under review, the numbers for 1911 and 1912 being 1,957 and 2,112 respectively. The increase was chiefly confined to "other animals". The numbers of leopards and wolves and wolves killed, however, decreased from 360 and 31 to 327 and 18, respectively.

Twelve thousand six hundred and seventy-four snakes are reported to have benn destroyed as against 11,960 in the preceding year. The increase occurred chiefly in the Presidency and Rajshahi Divisions, while on the other hand there was a considerable falling off in the Dacca Division.

6. Rewards paid for the destruction of wild animals and snakes.—The amounts paid in rewards for the destruction of wild animals and snakes were Rs. 13,287-2 and Rs. 190-4 respectively: the corresponding figures for 1911 were Rs. 12,660-12 and Rs. 197-8.

7. Licences for arms for the destruction of wild animals.—The number of licenses for fire-arms in Forms XVI,XVII, and XVIII of the Indian Arms Act, which were in force during the year under report, was 27,471, including 2,458 fresh licenses, against 30,256 and 1,204 in the preceding year.

I have the honour to be,

SIR,

Your most obedient servant,

H.F.SAMMAN,

Off g. Secretary to the Government of Bengal."[78]

"From – The Hon'ble MR. H.F.SAMMAN, I.C.S., Officiating Secretary to the

Government of Bengal, Revenue Department,

To —The Secretary to the Government of India, Home Department.

I am directed to submit herewith the annual report and the prescribed return relating to the mortality caused by wild animals and venomous snakes and the measures adopted in Bengal for their destruction during the year 1914.

2. Persons killed by wild animals.—There was an increase in the total number of persons killed by wild animals, the figure for the year under report being 332 as compared with 293 in the preceding

year. The increase is shared by the Presidency, Dacca and Rajshahi Divisions. There was a considerable decrease in the total number of deaths caused by tigers, the figure for the year under report being 60 against 84 in the previous year. The decrease was shared by all the Divisions except Burdwan, where the figure increased from 3 to 7. There was a considerable increase in the number of deaths caused by "other wild animals", the figure being 201 in 1914 against 148 in 1913. This increase was due mainly to deaths caused by alligators and crocodiles, the figure for the year under report being 158 against 99 in the preceding year.

3. Persons killed by snakes —There was a decrease in the number of persons reported to have died from snake bite, the number being 4,356 against 4,491 in 1913. The decrease occurred in the Presidency and Rajshahi Divisions, where the figures fell from 1,497 and 1,073 in 1913 to 1,380 and 992, respectively, in 1914. In all other Divisions there was a slight increase.

4. Cattle killed by wild animals.—It is reported that 4,750 head of cattle were killed by wild animals and 117 by snakes against 5,022 and 153, respectively, in 1913. The decrease under the former head occurred in the Presidency, Dacca and Rajshahi Divisions only. In the case of deaths from snake-bite the decrease was most noticeable in the Burdwan Division, where the figure fell from 29 in 1913 to 4 in 1914.

5. Wild animals destroyed.—There was a slight decrease in the total number of wild animals reported to have been destroyed during the year under review, the numbers for 1913 and 1914 being 2,858 and 2,824, respectively. The number of tigers destroyed increased from 180 in 1913 to 205.

There was a marked decrease in the number of snakes reported to have been destroyed during the year under report, the number being 10,215 against 17,134 in the preceding year. The decrease was most noticeable in the Presidency Division, where the figure fell from 8,724 in 1913 to 2,749 in the year under report. The explanation given for the substantial decrease in the Hooghly District is that the floods of 1913 had driven many snakes away from the district.

6. Rewards paid for the destruction of wild animals and snakes —The amounts paid in rewards for the destruction of wild animals and snakes were Rs. 17,477-2-0 and Rs. 157-5-6 respectively, the corresponding figures for 1913 being Rs. 19,051-11-6 and Rs. 172-1-0.

7. Licenses for the areas for the destruction of wild animals.—The number of licenses for fire-arms in Forms XVI,XVII and XVIII of the Indian Arms Act, which were in force during the year under report, was 26,009 including 2,993 fresh licenses, as against 26,961 and 3,230 in the preceding year."[79]

"FROM THE HON'BLE MR. L. BIRLEY, C.I.E., I.C.S.,

Offg. Secretary to the Govt. of Bengal,

TO THE SECRETARY TO THE GOVERNMENT OF INDIA,

HOME DEPARTMENT.

SIR,

I AM directed to submit herewith the annual report and the prescribed return relating to the mortality caused by wild animals and venomous snakes, and the measures adopted in Bengal for their destruction during the year 1915.

2. Persons killed by wild animals.—There was an increase in the total number of persons killed by wild animals, the figure for the year under report being 423 as compared with 332 in the preceding year. The increase is shared by all the divisions, except Chittagong. There was a considerable increase in the total number of deaths caused by elephants, tigers, leopards and bears, the figures for the year under report being 28,87,78 and 12 against 16,60,46 and 6, respectively, in the previous year. There was also a small increase in the number of deaths caused by "other wild animals", the figure being 216 in 1915 against 201 in 1914. This increase was due mainly to deaths caused by wild boars, the figure for the year under report being 60 against 39 in the preceding year.

3. Persons killed by snakes.—There was an increase in the number of persons reported to have died from snake-bite during 1915, the number being 4,709 against 4,356 in 1914. The increase occurred in the Dacca,Rajshahi and Chittgong Divisions, where the figures rose from 581,992 and 127 in 1914 to 816, 1,279 and 170, respectively, in 1915. The large increase is due to excessive floods which drove the snakes to take shelter in human habitations. In the Burdwan and Presidency Divisions there was a slight decrease.

4. Cattle killed by wild animals.—It is reported that 4,185 head of cattle were killed by wild animals and 188 by snakes during 1915 against 4,750 and 117, respectively, in 1914. The decease under the former head occurred in all the divisions. In the case of deaths from snake- bite the increase was most noticeable in the Burdwan and Rajshahi Divisions, where the figures rose from 4 and 68 in 1914 to 40 and 115, respectively, in 1915.

5. Wild animals destroyed.—There was a small decrease in the total number of wild animals reported to have destroyed during the year under review, the number being 2,769 against 2,824 for 1914. The total number of tigers and leopards destroyed, however, increased from 205 and 439 in 1914 to 275 and 496 in 1915.

There was an increase in the number of snakes reported to have been destroyed during the year under report, the number being 11,893 against 10,215 in the preceding year. The increase was most noticeable in the Burdwan, Dacca and Rajshahi Divisions where the figures rose from 4,892, 550 and 1,504 in 1914 to 6,178, 648 and 1,905, respectively in 1915.

6. Rewards paid for the destruction of wild animals and snakes.—The amounts paid in rewards for the destruction of wild animals and snakes were Rs. 17,977-12 and Rs.178-13, respectively, the corresponding figures for 1914 being Rs. 17,477-2 and Rs. 157-5-6.

7. Licenses for the areas for the destruction of wild animals.—The number of licenses for fire-arms in Forms XVI, XVII and XVIII of the Indian Arms Act which were in force during the year under report was 26,108 including 2,457 fresh license, as against 26,009 and 2,993 in the preceding year.

I have the honour to be,

SIR.

Your most obedient servant,

L. BIRLEY,

Offg.Secretary to the Govt. of Bengal."[80]

The above statistics of roughly fifty odd years clearly bring out the intensity of the man-animal conflict that prevailed in the colonial period. The assault on animals intensified by the granting of gun licences to destroy vermin, added to this was the loss of their habitat caused by excessive felling of trees to meet the timber needs of the imperial power and the resolve to extend agriculture by conversion of the wild to arable. Moreover animals were butchered to satisfy the Englishmen's passion for sport hunting. All this spelled doom for India's wildlife. The two World Wars exacerbated the crisis and in the years leading to the Independence, wildlife was further decimated. It was not that, that the colonial state did not take cognizance of the steady depletion of wild animals but those animals that hindered extension of agriculture or those that disrupted order by killing men and livestock could not be tolerated and hence there was a compulsion to eradicate them. The colonial state was faced with a peculiar situation where on the one hand they were driven by the mission of improvement and imposition of order and on the other their quest to achieve the same was negatively affecting the faunal reserve of the country. A compromise needed to be arrived at to save wild animals without jeopardising their mission. Concerns about wild animals began to be raised from within and even the colonial state realized that senseless slaughter would soon lead to extinction of certain species if not all animals. The fate of the Indian cheetah and the steady decrease in number of the Indian lion had made them apprehensive. The contradictory policies adopted by the colonial authorities clearly bring out their dilemma; on the one hand they were bent on exterminating those wild animals that they perceived as vermin on the other they inaugurated the regime of protection with the passing of forest and wildlife protection acts. But whatever the policies the chief objective was to safeguard their and protect their interest, so, both extermination and protection were pursued keeping their best interest in mind. The forest regulations that came into being with the passing of the first Forest Act of 1865 and continued through the nineteenth and the twentieth centuries, culminated in the setting up of the first National Park, the Hailey National Park, in 1935, modelled on the Yellow Stone National Park, to provide a safe haven to wildlife. However, the regulations were meant to exert exclusive control over the woodlands and wildlife preservation was primarily adopted to keep intact quarry for the sahib hunters, that these policies played a significant role in preserving wildlife is undeniable but it was not protection or preservation to keep intact the ecological balance or for any other such altruistic motives as the next chapter will try to establish.

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CHAPTER SIX

THE ROAD TO PRESERVATION

India was not the idealized tropics of the European imagination, she was diverse and not homogenous, characterized by the dry savannas and scrubby "jungles" as well as by luxuriant plant-life and dense rain forest, places of poverty and hardship and death as well as fecundity, pleasure and plenty and this helped the colonial government's determination to transform India, to create through an alliance of colonial capitalism and prospective Romanticism, a vision of an India so "improved" as to come close to the ideals of tropical abundance and productivity.[1] It was this desire to improve that also led to the wider colonial project of penetrating, controlling, disciplining and constantly monitoring and surveillance of the "last frontier" i.e. Wild India. The irresolute resolve of the colonial state to convert the wild, a store house of economic opportunities, into their exclusive domain is evident in view of the unflinching perusal of forest management from the second half of the nineteenth century. The creation of a government forest service in India in the mid nineteenth century set in motion a programme to change systems of forest management and recast them in the continental mould. Over the next five decades, the Indian forest department erected a framework of resource use modelled along European lines. Laws restricting resource use was passed, sylviculture systems inaugurated, and new approaches to forest utilization launched.[2] The Forest Charter of 1855 was the first attempt of the British government in the direction of forest governance. It made teak timber state property, and its trade was strictly regulated. In 1856, Dietrich Brandis, a German botanist, was appointed the first Inspector General of Forests and the Imperial Forest Department was set up in 1864 under his guidance. The first Indian Forest Act came into effect in 1865 and was followed by the Elephant Preservation Act of 1873, the Indian Forest Act, 1878, which gave greater power to the government, the Wild Birds and Game Protection Act, 1887 and the Act relating to fisheries in British India in1897. It was all these laws that carried India into the twentieth century and these legislations were promulgated essentially to preserve the forests, keep them alive, and of course control them. Controlling them meant controlling the wealth of India.[3] The Act of 1887 was later replaced by the Wild Birds and Wild Animals Protection Act, 1912 and this together with the Indian Forest Act, 1927 became the basis of preservation laws in the country. The anxiety about the steady supply of timber was the primary factor that led to the eventual annexation of what added up to one fifth of the land area of British India. But it was not timber alone over which sole control was sought to be established, animals too were extremely valuable assets, especially those animals that had trophy value and whose hides, tusks, horns and meat was greatly prized. The economic value of wild animals in addition to the fact that most mega fauna and even the lesser ones were highly coveted for leisure hunts made it imperative to curb the universal access to the woodlands of colonial India. The woodlands needed to be enclosed so that access was regulated and controlled by the colonial state to facilitate monopolistic control over this site. The indigenous people whose sustenance was depended on these woodlands from times immemorial now became outsiders in their own lands. What ensued

was a prolonged or rather unending feud in wild India; it was a conflict between the colonial state on the one hand and the wild animals and the indigenous people on the other.

CONTROL AND COMMAND OVER THE WILD FRONTIER

The first attempt at asserting state monopoly was through the Indian Forest Act of 1865[4] and it empowered the government to appropriate any land covered with trees. However, notification could only be effected if the existing rights of individuals and communities were not impinged upon. It is, of course, quite another story as to how many of these people had the awareness or t he propensity or ability to come forward and have their rights acknowledged and recognized. Act No. VII of 1865, which inaugurated the 'scientific era' of forest management in India, went thus:
Extracts from the Forest Act of 1865:[5]

2. The Governor-General of India in Council… may, by notification in the Official Gazette, render subject to the provisions of this Act, such land covered with trees, brushwood, or jungle, as they may define for the purpose by such notification: Provided that such notification shall not abridge or affect any existing rights of individuals or communities.
3. For the management and preservation of any Government Forests or any part thereof in the Territories under their control, the Local Governments may, subject to the confirmation hereinafter mentioned, make rules in respect of the matters hereinafter declared, and from time to time may, subject to the like confirmation, repeal, alter and amend the same. Such Rules shall not be repugnant to any law in force.
4. Rules made in pursuance of this Act may provide for the following matters:
   First: The preservation of all growing trees, shrubs and plants, within Government Forests or of certain kinds only - by prohibiting the marking, girdling, felling and lopping thereof, and all kinds of injury thereto; by prohibiting the kindling of fires so as to endanger such trees, shrubs and plants; by prohibiting the collecting and removing of leaves, fruits, grass, wood-oil, resin, wax, honey, elephants' tusks, horns, skins and hides, stones, lime or any natural produce of such Forests; by prohibiting the ingress into and the passage through such Forests, except on authorised roads and paths; by prohibiting cultivation and the burning of lime and charcoal, and the grazing of cattle within such Forests.
   Second: The regulation of the use of streams and canals passing through or coming from Government Forests or used for the transport of timber or other the produce of such Forests - by prohibiting closing or the blocking up for any purposes whatsoever of streams of canals used or required for the transport of timber or Forest produce; by prohibiting the poisoning of or otherwise interfering with streams and waters in Government Forests in such a manner as to render the water unfit for use; by regulating and restricting the mode by which timber shall be permitted to be floated down rivers flowing through or from Government Forests and removed from the same;

by authorising the stoppage of all floating timber at certain Stations on such rivers within or without the limits of Government Forests for the purpose of levying the dues or revenues lawfully payable thereon; by authorising the collecting of all timber adrift on such rivers, and the disposal of the same belonging to the Government. Third: The safe custody of timber, the produce of Government Forests - by regulating the manner in which timber, being the produce of Government Forests, shall be felled or converted; by prohibiting the converting or cutting into pieces or burning of any timber, or the disposal of such timber by sale or otherwise, by any person not the lawful owner of such timber, or not acting on behalf of the owner.

7. All implements used in infringing any of the Rules made in pursuance of this Act, and all timber or other Forest produce, removed or attempted to be removed, or marked, converted, or cut up contrary to such Rules shall be confiscated.
8. Any Police Officer or person employed as an Officer of Government to prevent infringement of the Rules made in pursuance of this Act may arrest any person infringing any of such Rules, and may seize any implements used in such infringement, and any timber liable to confiscation under this Act.

Almost immediately after the legislation of 1865 a search commenced for a more stringent and inclusive piece of legislation[6] and after much debate and discussion the Act of 1865 was superseded by the Indian Forest Act of 1878 which was designed to facilitate strict state control over forest resources, and was distinctly 'annexationist' in nature.[7] This Act sought to do away with all privileges and rights that were not explicitly granted by the state. Through a single piece of legislation, a centuries-old system of rights and privileges for forest-inhabiting and forest-dependent communities was terminated. The Act of 1878 went thus:

Chapter II: Of Reserved Forests

3. The Local Government may from time to time constitute any forest-land or waste-land, which is the property of Government or over which the Government has proprietary rights or to whole or any part of the forest-produce of which the Government is entitled, a reserved forest in the manner hereinafter provided.

4. Whenever it is proposed to constitute any land a reserved forest, the Local Government may publish a notification in the local official Gazette:

a) declaring that it is propose[8] to constitute such land a reserved forest;

b) specifying, as nearly as possible, the situation and limits of such land; and

c) appointing an officer (hereinafter called 'the Forest-Settlement Officer') to inquire into and determine the existence, nature and extent of any rights alleged to exist in favour of any person in or over any land comprised within such limits or in or over any Forest-produce and to deal with the same as provided in this Chapter.

8. For the purpose of such inquiry, the Forest-Settlement Officer may exercise the following powers, that is to say:

a) power to enter, by himself or through any officer authorised by him for the purpose, upon any land, and to survey, demarcate and make a map of the same; and

b) the powers of a Civil court in the trial of suits.

9A. (1) In the case of a claim relating to the practice of shifting cultivation, the Forest-Settlement-Officer shall record a statement setting forth the particulars of the claim and of any local rule or order under which the practice is allowed or regulated, and submit the statement to the Local Government, together with his opinion as to whether the practice should be permitted or prohibited wholly or in part.[9]

(2) On receipt of the statement and opinion the Local Government may make an order permitting or prohibiting the practice wholly or in part.

(4) The practice of shifting cultivation shall in all cases be deemed a privilege subject to control, restriction and abolition by the local Government.

25. Any person who-

a) makes any fresh clearing prohibited by section 5, or,

b) sets fire to reserved forest, or, in contravention of any rules made by the Local Government, kindles any fire or leaves any fire burning, in such manner as to endanger such a forest; or who, in a reserved forest- [10]

c) kindles, keeps or carries any fire excepts at such seasons, as the Forest Officer may from time to time notify in this behalf;

d) trespasses or pastures cattle, or permits cattle to trespass;

e) causes any damage by negligence in felling any tree or cutting or dragging any timber;

f) fells, girdles, lops, taps or burns any tree, or strips off the bark or leaves from, or otherwise damages the same;

g) quarries stone, burns lime or charcoal, or collects, subjects to any manufacturing process, or removes any forest-produce;

h) clears or breaks up any land for cultivation or any other purpose; or,

i) in contravention of any rules which the Local Government may from time to time prescribe kills or catches elephants, [11] hunts, shoots, fishes, poisons water or sets traps or snares; shall be punished with imprisonment for a term which may extend to six months, or with a fine not exceeding five hundred rupees, or with both, in addition to such compensation for damage done to the forest as the convicting Court may direct to be paid.

Chapter III: Of Village Forests

27. The Local Government may from time to time assign to any village-community the rights of Government to or over any land which has been constituted a reserved forest, and may cancel such assignment. All forests so assigned shall be called village-forests.

The Local Government may from time to time make rules for regulating the management of village forests, prescribing the conditions under which the community to which any such assignment is made may be provided with timber or other forest-produce or pasture, and their duties for the protection and improvement of such forest.

All provisions of this Act relating to reserved forest shall (so far as they are consistent with the rules so made) apply to village forests.

Chapter X: Penalties and Procedure

52. When there is reason to believe that a forest offence has been committed in respect of any forest-produce, such produce together with all tools, boats, carts and cattle used in committing any such offence, may be seized by any Forest-Officer or Police-Officer.

63. Any Forest-Officer or Police-Officer may, without orders from a Magistrate and without a warrant, arrest any person against whom a reasonable suspicion exists of his having been concerned in any forest offence punishable with imprisonment for one month or upwards.

Chapter XI: Cattle-Trespass

69. Cattle trespassing in a reserved forest or in any portion of a protected forest which has been lawfully closed to grazing shall be deemed to be cattle doing damage to a public plantation within the meaning of the 11th section of the Cattle Trespass Act, 1871, and may be seized and impounded as such by any Forest-Officer or Police-Officer.

Chapter XII: Of Forest Officers

72. All Forest-Officers shall be deemed to be public servants with the meaning of the Indian Penal Code.

73. No suit shall lie against any public servant for anything done by him in good faith under this Act

Most of the provincial Governments were quite satisfied with the Act of 1878. But, as with the 1865 Act, the Madras Government was unhappy with the various provisions of the new Act. So in British India, central legislations did not find unquestioned acceptance by the provinces, the micro areas had strong opinions and they could and did differ when their provincial interests clashed with that of the centre. However both the centre and the provinces were driven by the same motives of the greatest benefit to the colonial power, so even when they differed the differences did not jeopardise their self interest.

The Indian Forest Act of 1878 radically changed the nature of common property and made it state property. The rights of people over forest lands and produce were later regarded as concessions. According to the 1878 Forest Act, forests were categorized into three types: Reserved, Protected, and Village forests. Reserved forests were deemed the most commercially valuable and amenable to sustained exploitation. Overall state control of reserved forests was sought, involving either the relinquishing or transfer of other claims and rights. Very occasionally, limited access to these forests was granted. Legally, the process of reservation of forests could be challenged though rural communities had little experience with legal procedures, and illiterate villagers were often unaware that a survey and demarcation was in progress. Protected forests were similarly state-controlled, but

some concessions were granted conditional to the reservation of commercial tree species when they became valuable. Protected forests could also be closed to fuel wood collection and grazing, whenever it was deemed necessary to do so. As demand for timber increased, many protected forests were re-designated reserved forests so that the state could exercise complete control over them. This Act also provided for the classification of forests as village forests, apparently to meet the needs of people residing in villages so that they could be kept away from commercially valuable reserved and protected forests. However, this was not exercised by the colonial government over most of India. The new legislation greatly enlarged the punitive sanctions available to the forest administration, closely regulating the extraction and transit of forest produce and prescribing a detailed set of penalties for transgressions of the act.[12] People were, by and large, disenfranchised from accessing their traditional forests and no alternative was provided to them.

The mapping of forests allowed the implementation of scientific management. There is no denying that the British introduced the concept of scientific management of forests in India, but its dominant paradigm very evidently was to pursue maximum sustainable yields and management practices were organized around this principle. This is evidently palpable from the debates that ensued among the various functionaries of the colonial state before the passing of the act. An important conference of forest officers was held in Allahabad in 1874 to discuss the limitations of the Act VII of 1865. The conference was organised by Baden Powell, who was then officiating as the Inspector General of Forests. The following extracts are from a paper entitled, 'On the defects of the existing Forest Law' presented at the conference by Baden Powel:

"*The former rulers of these lands, of course had no idea of what forests were worth in any sense of the word; they only looked on them as immense jungles that were infested with tigers and wild beasts, and were far larger than was necessary for their sport; consequently they cared nothing for them. In the course of time… without any distinct grant of license, and without any idea of asserting a right as against the ruling power, or against other individuals or communities, everybody got accustomed to graze and cut in the nearest jungle lands, because nobody cared whether he did or not. Now it is hardly necessary to point out that this does not constitute a legal or prescriptive right properly so called… Hence, while the forests were, and are still, overrun with people cutting and doing what they like, they are nevertheless in theory, the absolute and unrestricted property of the state.*

Now this settlement of forest privileges and this regulation and limited interference with private rights being conceded, how does our Forest Law, Act VII of 1865, deal with the question? Why, it quietly ignores the first subject altogether; and as regards the second, it deliberately declines to allow any interference with any private right whatever. I am aware that this would be enough of itself to condemn the Act without another word… But besides these cardinal defects, there are, as I have already intimated, numerous others…The section 8 [of the 1865 Act] gives the one satisfactory power in Act, and must be maintained in a law; arrest without warrant is absolutely essential…"[13]

In the same conference a paper was read by Major Kenneth Mackenzie, 'On the principles on which a settlement should be effected, in demarcating forests, with villagers who have enjoyed the general run of forests with undefined rights'. On Mackenzie's paper, Baden Powell made the following remarks:

"*Here he [Mackenzie] bears out fully the principle in all such settlements, which is what I ask the conference to support, viz., that having once made a careful settlement, determined what forest we are going to reserve, and how we are going to treat it, let us gently but firmly, stick to what the Government have sanctioned, and never mind what people say. In the first place, let the interests of the people be fully represented by an intelligent, reasonable, and experienced civil officer of the district or settlement staff, and let justice full and fair be done to everybody… You never did invent nor ever will invent any system of conservancy worth the name, which was popular or which everybody liked. Forest conservancy is as much hated in Europe after three centuries of practice, as it ever was; and if so, how can you expect to be liked in India? Whatever you do, you affect some one: you limit the freedom of some people in their grazing, burning and cutting, and they hate it accordingly. To suppose therefore that you can carry with you the people in the efforts to conserves is a vain hope. But though you cannot be popular and please everybody, you can and must be just.*" [14]
Another paper by C. F. Amery sought to establish that the rights of the local population were actually privileges, concessions granted by the State. In a later forest conference held at Simla in October 1875, Amery openly declared that:

"*The right of conquest is the strongest of all rights-it is a right against which there is no appeal.*"[15]
Dietrich Brandis, who wrote the first draft of the revised act in 1869, set forth his views on the above issues in his memorandum on forest legislation written in 1875. On the question of the rights of the local population over forests, Brandis writes:

"*It has been maintained that the customary use of forest in India here spoken of is usually not based upon a right but upon a privilege. Great stress has been laid upon this point in Mr. Baden-Powell's able paper on forest legislation in the Report of the Conference of 1874. He argues that the villagers who from time immemorial were accustomed to cut and graze in the nearest jungle lands did not acquire a right by prescription, because they used the forest without any distinct grant or license and without any idea of asserting a right as against the ruling power or against other individuals or communities; that the State had not exercised its full right over the forests, which were left open to anyone who chose to use them; but that the right of the State was unimpaired and was asserted whenever a Native Ruler chose to close whole areas of forests to preserve the game, as in the well-known instances of the Belas of Sindh enclosed by the Amirs.* [16]

The view of the case merits careful consideration, and doubtless in many cases what are sometimes called forest rights are not rights at all, but merely privileges which are exercised by permission and at the pleasure of Government and not as of right. A large class of cases will, however, remain and must be provided for by Forest Law, in which the custom to graze the village cattle and to cut wood for the requirements of the village have grown up in a manner in every respect similar to the growth of rights of Common or of forest rights in Europe."[17]

The British attitude is best revealed by the following the speech of Honourable T. C. Hope, while moving the Forest Bill in the Viceregal Council on March 6, 1878:

"*Our general principle is very plain; forest conservancy cannot go on without our, in some cases, taking something. But we take as little as we can-no more than is necessary for the purpose-and that*

little we pay for in one form or another… I submit that this is a policy clear, reasonable, in harmony with European legislation, and that this is the only policy compatible with the true interest of the community at large. There are of course persons who advocate an opposite theory of forest conservancy… It would suffice, they think, that…'Village communities should be encouraged to preserve and improve their own customary forests or jungles by reaping to their villages benefits therefrom'. In short if you want the forest preserved, only let people alone, and they will do it. I believe such a theory to be a delusion, and a most mischievous one. Whatever you do, do as leniently as possible; do equitably and only as far as is well shown to be necessary in each case, but act you must, if you are to save what is left of the once vast forests of India, to check deterioration of climate, and to diminish risks of famine. Under any system of laissez faire you are only fiddling, while Rome, or your forest, is burning. The effects of such a system under Native Governments, and during the earlier years of our own rule, are written in broad letters upon a thousand hills, and no where are they written more plainly… than upon the uplands of Southern India…The final issue, then is simple. If the Council prefer the principle of the Bill to any such theory, then I submit that the details are well calculated to carry out that principle."

Enumerating the defects of the 1865 Act, Mr. Hope continued:

"*It drew no distinction between the forests which required to be closely reserved, even at the cost of more or less interference with private rights, and those which merely needed general control to prevent improvident working. It also provided no procedure for enquiring into and settling the rights which it so vaguely saved, and gave no powers for regulating the exercise of such rights without appropriating them. It obliged you, in short, either to take entirely, or to let alone entirely. On control over private forests in the general interests of the community, it was absolutely silent. For duties on timber, even those actually levied, it gave no authority. Protection for Government forests, so interlaced with private ones as to be in chronic danger of plunder, there was none. In various minor points also it was deficient.*"[18]

The above debates and speeches establish beyond doubt the mentality and objectives of the colonial power. In the name of scientific forestry natives were denied their legitimate access to the forests. Their rights ceased to be rights and were termed privileges which implied that now the indigenous people would always be at the mercy of the colonial masters and would have to fervently hope and pray that certain concessions would be doled out to them so that they could eke out a living The last unconquered frontier was very astutely being penetrated and aggressively controlled and its resources was certainly being brought under the sole command of the colonial power. The following statistics prove beyond doubt the exact objective behind the introduction of scientific forestry in colonial India:

Growth in Forest Revenue

Table-5 below clearly establishes the phenomenal growth achieved in forest revenue with the inception of scientific forestry for quinquennial periods from 1864 to 1939. The revenue for India (excluding Burma) was Rs.30.19 million in 1937-38 and Rs.124.37 million at the end of the war in 1944-45. On the eve of Independence in 1946-47, revenue from forests in India excluding those of Pakistan, was Rs.104.80 million.

Table-6 below gives the increase in the area of forests under the control of the Forest Department and especially the progress achieved in the demarcation of Reserved Forests from 1878 till 1935. The total area classed as forests including private and other forests and waste lands etc. was over 4,50,000 sq. miles in 1897-98. After forty years, in 1935-36, this figure had come down to 3,19,286 sq. miles, of which around 58,000 sq. miles constituted private forests and only 854 sq. miles constituted forests under the proprietorship of corporate bodies.

Table-5: Average Quinquennial Growth in Forest Revenue and Expenditure[19]

	Average Annual	Average Annual
Period	Revenue (in million Rs.)	Expenditure (in million Rs.)
1864-1869	3.74	2.38
1869-1874	5.63	3.93
1874-1879	6.66	4.58
1879-1884	8.82	5.61
1884-1889	11.67	7.43
1889-1894	15.95	8.60
1894-1899	17.72	9.80
1899-1904	19.66	11.27
1904-1909	25.70	14.11
1909-1914	29.60	16.37
1914-1919	37.14	21.12
1919-1924	55.17	36.71
1924-1929	59.54	35.11
1929-1934	44.15	32.51
1934-1939	43.94	28.29

Table-6: Growth in Area of Forests under the Forest Department (in sq. miles)

Year	Reserved	Protected	Unclassed	Total
1878	-	-	-	14,000

1881-82	46,213	8,612		
1884-85	49,21	13,103		
1889-90	56,000	30,000		
1897-98	81,414	8,845	27,679	1,17,648
1913-14	96,297	8,390	1,40,925	2,45,612
1917-18	1,01,233	8,752	1,41,527	2,51,512
1922-23	1,00,922	7,238	1,15,544	2,23,704
1930-31	1,07,753	6,263	1,35,694	2,49,710
1934-35	1,06,240	6,938	1,68,333	2,81,511

Reservation of forests went hand in hand with the 'protection' movement which began in the1860s. Protection of the wealth of the forest was indispensable for the colonial state and the regime of 'protection' culminated in the Wild Birds and Game Protection Act of 1887. Timber was the main resource of the forest but the faunal wealth was equally precious. Years of senseless slaughter of wild animals raised concerns of extinction which threatened to jeopardize their interest. However protection meant the sole rights of consumption and this is borne by the fact that objective of the pioneers of preservation like the the Nilgiri Game Association, set up in 1879 was 'the preservation of existing game in the Nilgiri district and the adjoining areas included under Madras Act II of 1879 and the introduction and preservation of other game birds and animals' to facilitate or rather not hinder the supply of 'game' so that they could continue with the sport of shikar. A game association's objective too could be no other, so the first voices regarding preservation was raised by those that wanted to continue with their leisure hunts without any impediments.

In fact if one delves into the records of preservation in colonial India one is confronted with this reality that of the desire to preserve in order to facilitate sole use. With the introduction of license fees and 'open' and 'close' seasons the right to enter the reserved forest was in effect confined to the colonizer and their native accomplices. There were certain other voices that could be heard too, those voices that came from those genuinely concerned about depletion of both plant and animal species and it came from individuals interested in natural history like those gentlemen who went on to form the Bombay Natural History Society in 1883 but they too could not transcend their colonial identity and even when they tried to influence the government on decision making, the interests of the colonial power were never compromised with. The various Hunt Clubs and Planters' Associations also raised concerns about depletion of wild animals but their apprehensions is easily discernible, decline of species meant decline of sports and hence trophies. It was the concern about decline in numbers raised by sports hunters all across India that led to the Act of 1887. The Act protected game for the hunting season and attempted to prevent the slaughter of wild animals indiscriminately and it also sought to protect insectivorous birds in the interest of agriculture. Preservation marked the

extension into the Empire of restrictions imposed for centuries in the mother country in one form or another.[20] Though the demand for preservation stemmed partly from a desire to save species on the brink of extinction its primary purpose was to cater to the needs of the colonial power i.e. keep sufficient supplies of game for the white shikari and thus ensure the steady supply of trophies. It was also partly necessitated by the desire to keep the resident Englishmen employed in the army or in civilian posts happy. The lure of the hunt as has been mentioned before was used as a bait to attract reluctant Englishmen to this rather inhospitable country, so the steady supply of game animals needed to be maintained to continuously attract new men to this alien land as well as keep those already here happy and contended. The preservation policy of the government involved not only enclosing the woodlands but also included the systematic denial of access of the natives to the same on the pretext of grave misuse leading to depletion of species. The allegation served twin purposes; on the one hand it legitimised the exclusion of the natives from the 'forests' on the other it helped to exonerate themselves from the criminal act of leading many plant and animal species to the brink of extinction.

The Act of 1887 was confined to Municipal areas and Cantonments only because of :-

a. The predominant claims of agriculture, to which all other considerations must be subservient.

b. The undesirability of interfering with the livelihood of forest and other wild tribes, who largely depend upon the capture of game for their subsistence.

c. The general objection to the creation of new penal offences.

d. The unjustifiability of legislation in the interest of the sportsmen.

e. The absence of evidence that the destruction of birds for the sake of their plumage was carried out on an extensive scale, and that there was any serious diminutions of their numbers.[21] The imperial power was pragmatic enough to embrace caution in all their policies and the policies regarding the forests of India were no exceptions. The Act of 1887 was limited to those areas over which imperial control was unquestionable. Moreover the traditional rights of the tribes who resided in the forest and its vicinity were not interfered with for the time being, so, it was cautious, sustained aggression, a case of realizing the objective slowly but surely. The next step towards control and domination was manifested by the adoption of the Forest Policy of 1894, which gave agriculture predominance in relation to forests; the path was thus paved to extend arable at the cost of forests. The sole motive of the colonial power was profit maximization; if conversion of forests to agricultural lands served this purpose then it was to be resorted to by all means.

The Act of 1887 gave way to the Wild Birds and Wild Animals Protection Act, 1912 and it put the interests of wildlife on the agenda of the country for the first time ever. The perusal of the Act of 1912 reveals the intent of the government to save the country's wildlife but the tiger remained outside the Schedule of the animals that were to be protected, it was still perceived as a 'vermin' whose extermination was justified. The imperial authority's power struggle with the animal world continued unabated till the closing years of the Raj. The Wild Birds and Wild Animals Protection Act, 1912 was an Act to make better provision for the protection and preservation of certain wild birds and animals. It was enacted as follows:-

"*1.Short title and extent.*

(1) This Act may be called the Wild Birds and Animals Protection Act, 1912; and

(2) It extends to the whole of India.

2. Application of Act.

(1) This Act applies, in the first instance, to the birds and animals specified in the Schedule, (given below) when in their wild state.

(2) The Provincial Government may, by notification in the Official Gazette, apply the provisions of this Act to any kind of wild bird or animal, other than those specified in the Schedule, which, in its opinion, it is desirable to protect or preserve.

3. Close time.

The Provincial Government may, by notification in the Official Gazette, declare the whole year or any part thereof to be a close time throughout the whole or any part of its territories for any kind of wild bird or animal to which this Act applies, or for female or immature wild birds or animals of such kind; and, subject to the provisions hereinafter contained, during such close time, and within the areas specified in such notification, it shall be unlawful-

(a)to capture any such bird or animal, or to kill any such bird or animal which has not been captured before the commencement of such close time;

(b) to sell or buy, or offer to sell or buy, or to possess, any such bird or animal which has not been captured or killed before the commencement of such close time, or the flesh thereof;

(c)if any plumage has been taken from any such bird captured or killed during such close time, to sell or buy, or to offer to sell or buy, or to possess, such plumage.

4. Penalties.

(1) Whoever does, or attempts to do, any act in contravention of Section 3, shall be punishable with fine which may extend to fifty rupees.

(2) Whoever, having already been convicted of an offence under this section, is again convicted thereunder shall, on every subsequent conviction, be punishable with imprisonment for a term which may extend to one month, or with fine which may extend to one hundred rupees, or with both.

5. Confiscation.

(1) When any person is convicted of an offence punishable under this Act, the convicting Magistrate may direct that any bird or animal in respect of which such offence has been committed, or the flesh or any other part of such bird or animal, shall be confiscated.

(2) Such confiscation may be in addition to the other punishment provided by Section 4 for such offence.

6. Cognizance of offences.

No Court inferior to that of a Presidency Magistrate or a Magistrate of the second class shall try any offence against this Act.

7. Power to grant exemption.
Where the Local Government is of opinion that, in the interests of scientific research, such a course is desirable, it may grant to any person a license, subject to such restrictions and conditions as it may impose, entitling the holder thereof to do any act which is by Section 3 declared to be unlawful.

8. Nothing in this Act shall be deemed to apply to the capture or killing of a wild animal by any person in defense of himself or any other person, or to the capture or killing of any wild bird or animal in bona fide defense of property.

9. XX of 1887 Repeal. The Wild Birds Protection Act, 1887, is hereby repealed.

THE SCHEDULE
i. Bustards, ducks, florican, jungle fowl, partridges, peafowl, pheasants, pigeons, quail, sand-grouse, painted snipe, spur fowl, wood-cock, herons, egrets, rollers, and king-fishers.
ii. Antelopes, asses, bison, buffaloes, deer, gazelles, goats, hares, oxen, rhinoceroses and sheep. [22]

It is interesting to note that in the Schedule the tiger was not included; it was still considered a vermin whose extermination was legally justified though statistics prove that frenzied assault on the animal had resulted in steady depletion of numbers. The 'bounty system' was thoroughly abused and the crisis was exacerbated with the improvement in guns and fire-power. The hunting records of the sahibs and their native accomplices give a clear picture of the mayhem unleashed. George Yule had killed 400 tigers and M. Gerrard 227. The local rulers of Udaipur and Gauripur shot more than 500 tigers each. The Nawab of Tonk killed more than 600 tigers. [23] Wild dogs, wolves and leopards too, did not make it to the list of animals given in the Schedule. They were also slaughtered at will. Over 80,000 tigers, more than 150,000 leopards and 200,000 wolves were slaughtered in the fifty years from 1875 to 1925[24] and this was only the recorded number of animals killed for rewards and when the unrewarded and unrecorded numbers are added to this then the enormity of the destruction perpetrated by the imperial power makes one shudder at the devastation caused to wild India. Wild India was penetrated and held hostage to the needs and desires of the colonial authority.

WILDLIFE CRISIS AND THE 'BATTLE' TO SAVE WILDLIFE

At the turn of the century India had spiralled into a wildlife crisis. The First World War had taken a toll on India's timber supply. The guns were more advanced. Motor cars had entered India. The assault on wildlife increased further. With the deepening of the crisis there were strident calls for preservation and thus started a phase of 'battling' to save the wilds.[25] The 1920s were the crucial years. The horrors of hunting over the previous decades must have given rise to a sense of

hopelessness. The 1920s was also a time for great bursts in human populations. This was when the sharpest rise in births took place. Mortality levels were also coming down. The pressure on the forests had increased sharply. By 1926 there was much discussion, dialogue and debate on 'game' preservation in India.[26] The organizations like the B.N.H.S. which had raised their voices from the latter half of the nineteenth century took up the issue of preservation even more assiduously. In an article published in its journal in 1926, issues regarding the gravity of the crisis and the need for preservation were raised.

"*...It is as a poacher that man is the great destroyer.*

In considering how to deal with the problem of the native who kills game, the first thing to be considered is his reason for doing it, and three reasons immediately appear. These are first for profit, in order that he may sell the meat, hide and horns, and this would appear by far, the most common one.

The second is, for the meat only, and this is not so common.

The third reason is, to protect his crops, and no one can possibly complain of an agriculturist in any part of the world protecting his property in such a way.

The increase in number of gun licences issued has had a most fatal influence on the existence of game in many districts. It is not that the licences themselves have done the maximum damage, but they have a habit of lending or hiring out their weapons to others. In many cases it is the custom for dear old Indian gentlemen whose figure puts out of question their personal taking an active part in hunting, to send out their retainers with a gun to kill game for them, regardless of season, sex or size; and there is no doubt that by stopping the abuse of a gun licence granted as a personal privilege, much game would be saved. It is very often for the purpose of such household use that gun licences are applied for.

Such action would not however affect the poacher who poaches for pecuniary profit, and from a larger number of letters received, it is evident that the buyer is the person to get at.

The formation of the sanctuaries is the principle point on which the letters differ. Where recommended the suggestion is always qualified by the remark that they are expensive; to be effective, they must be well guarded by unbribable Game Warden, and this is put forward as an insuperable objection by several. The majority are of the opinion that existing Reserved Forests are sufficient sanctuaries in themselves, and the general consensus of opinion is that the licence holder is of considerable assistance in Game preservation. In this connection it might be remembered what as happened on nullahs being closed in Kashmir for a long period as sanctuaries: they have almost invariably been found almost empty of game on being reopened, closing them having proved to benefit the poacher only. This is the almost inevitable fate of any sanctuary in India unless unbribable game watchers are found at very high rates of pay. As there is no prospect of such paragons ever being discovered without expenditure of money never likely to be available, the provision of sanctuaries may be relegated to the dim future.

There is again the effect of preservation on the Forest itself. Bison and Sambhar both do a great deal of damage to young teak and other valuable timber trees, and must be kept within bounds. A

sanctuary to be effective must be big, and there few places where the Forest Department can afford to set aside a large tract of forest as a sanctuary.
One correspondent draws attention to the balance being upset in another direction, and gives figures to support his contention that tigers have taken to man-eating much more of late years in the Northern Circars owing to the decrease in the natural food, namely deer, at the hands of poachers.
To summarize the impression gained from the letters read it appears that what is principally needed is a law forbidding the sale of any part of a big game (carnivore excepted) save by a Forest Officer in public interest. An adequate penalty to be enforced.
Secondly that the use of a gun except by the licence holder in person be strictly forbidden and penalties exacted."[27]

However the most important point that emerges out of the above extract is singling out the poacher as the chief culprit, responsible for destruction of animals and the poacher was almost always a native. The Indian landed gentry too, were held, partly responsible as they had loaned their guns to their retainers who destroyed animals but the Englishmen were not in any way held responsible though in actuality it was their acts which caused maximum harm to animals. In protected forests the depredations of animals were condemned as they harmed valuable timber, one can therefore safely assume that it was thought to be perfectly justified to exterminate those rogue animals which harmed the interest of the colonial power. The concern for preservation was a very genuine concern but it was flawed because it discounted the role of the colonial power in decimation of both flora and fauna. This was the major drawback of the preservation policy pursued in colonial India; it never tried to address the problem of decline realistically, the blame for decimation of both plant and animal species was placed squarely on the shoulders of the indigenous people, the Englishmen's role was conveniently denied. The very foundation on which the preservation policy in colonial India was framed was imperfect, so the outcome too was flawed.

The closing years of the 1920's saw a spurt in the demand for preservation as nearly two centuries of assault on wild animals had spiralled into a wildlife crisis. The crisis was accentuated by the rapid rise in population which led to a greater demand for arable land and also residential areas, the steady development of railway network also took a toll on woodlands because it led to an endless demand for wooden sleepers. Deforestation was a natural fall out of the above. Wildlife had very little chance of survival as it now faced a serious loss of habitat in addition to the direct assault on them. A new legislation was enacted to bring the situation under control and this led to the Indian Forest Act of 1927 which replaced the earlier Act of 1878. The Act embodied all the major provisions of the earlier one, extending it to include those relating to the duty on timber. Discussions were held on shooting rules, close and open seasons, the role to be played by game preservation societies and the need to save animals for the sake of posterity. However on closer analysis it becomes evident that the Act attempted only minor modifications of Act VII of 1878. According to Stebbing:

"The changes were small and consisted mainly in redrafting the previous Act and its amendments. The small changes included, in Section 30(b), permission to enclose portions of protected Forests and suspend rights therein for a maximum period of thirty years compared with the twenty years

fixed in the 1878 Act. In Section 79 the duties of the public to prevent and extinguish forest fires and help Forest or Police Officers in preventing forest offence were clarified and made somewhat more extensive."[28]

One important change that Stebbing does not mention consisted in the replacement of all reference to '*rights of communities*' by '*rights and privileges of persons*'. There by age old rights of the forest communities over the forest were legally prohibited.

Many suggestions were made as to what possibly could be the best policy that could be adopted to protect and preserve wild animals. There was an ongoing debate on whether sanctuaries were the best bet against extermination of animals. The Annual Report of the Journal of the Bombay Natural History Society, Vol. 34, 1929, gives us an idea about the prevailing state of affairs:

"*The subject (of Game Preservation) is one of growing importance and is attracting attention in all parts of the Empire. The general consensus of opinion in India is that game sanctuaries, if by such are meant areas within which no shooting is to be allowed, are not the remedy. They will be paradise for poachers. What are wanted are Game Preserve in which shooting under regulation is allowed, and the alienation of forest land, which is the home of interesting species of Forest Game which would be exterminated were the land put under cultivation, should be prohibited. Our present difficulties are mainly due to the increasing number of officials with no interest in sport or natural history.*"[29]

The position taken by Dunbar Brander regarding sanctuaries is interesting. He differentiates between regions and opines that:

"*the Himalayan and Terai regions are hardly suitable places, even if required, in which to create National Sanctuaries. With regard to the Central and Southern areas, the case is different. In these tracts they will form a useful and interesting purpose, especially in the former, where the fauna can be readily observed, will readily tame and will be a delight to visitors.*

I know every square mile of the Central Provinces; I can assert that that the area is suited par excellence for a National Park. This is known as the Banjar Valley Reserve."[30]

The debate went on unabated, even before reserves came up to save those species that were thought to be endangered; a rhino refuge was set up as early as 1908 on the banks of the Brahmaputra in Assam, this was followed by the conversion of closed shooting blocks of Patli Dun in the United Provinces, the Duars forest in Jalpaiguri in Bengal and the Banjar Valley in Central India into wildlife sanctuaries [31] and eventually the first national park, the Hailey National Park came up in the United Provinces in 1935. But the pressure exerted on wild India by the British was still substantial, the concern for wild animals did not result in prohibition on hunting and the two World Wars saw large-scale tree felling to meet the war time demands,[32] in fact till their departure and even long after the assault on Wild India continued with no respite in sight for wild animals till the inauguration of Project Tiger.

Preservation in colonial India had consumption inextricably woven into its fabric, it was to facilitate sole use that the first initiatives on preservation was taken. But as the situation threatened to spiral out of control new avenues were explored to protect species. Issues like creating region specific laws to protect species were mooted as it was felt that every region had their own specific

local problems for which area specific solutions were needed. This policy attained fulfilment when from 1935 forests became entirely the concern of the provinces. It was felt that "*any action taken is bound to vary in accordance with local provincial conditions, which are so different in various provinces that one standardized ordinance for India would be unworkable. Take the case of tigers. Suggestions have been made for elaborate rules for the protection of tigers in particular. But this might be undesirable in some parts of India where nature's balance of game has been disturbed, and the tiger finds it too difficult to get his food out of the forest, whereupon he turns to cattle lifting or even to the easiest quarry of all man himself.*"[33] Things were being worked and reworked, tried and retried to find the best possible way to preserve wild animals in particular and India's woodlands in general.

There was evident some genuine concerns for wildlife and vanishing species. Individuals raised their voices for preservation and it was mainly the avid hunters themselves who rallied around the cause of preservation. Important persons like Jim Corbett, F.W. Champion, Dunbar Brander, S.H. Prater, Stanley Jepson etc. started to champion the cause of preservation. Corbett's hunting tales have enthralled readers through generations though he never gave up the gun, he did play a significant part in furthering the cause of preservation. He was instrumental in influencing the provincial government to set up the first national park in India in 1935, the Hailey National Park. The park was carved out of a Reserved Forest where hunting was forbidden but timber cutting not disallowed. There was the expectation that the number of tigers would increase in the protected area and move to the adjacent Shooting Block where hunting was legally permitted. The concern for preservation thus grew out of the ethos of the hunt.[34] In fact the 1920s also saw a different Corbett, smitten by the beauty of Wild India; he went to shoot in the wilderness not with the gun but with his newly acquired camera. Mahesh Rangarajan is of the opinion that this new Corbett personified the shift in the aesthetic sensibilities of the imperial authorities.[35]

One of the earliest advocates of shooting animals with the camera rather than the gun was F.W. Champion; he was the pioneer of wildlife photography in India and a sharp critic of sportsmen. He was convinced that the invention of the motor car had aided the cause of the hunters and was thus detrimental to the cause of wild animals. Although he was one of the greatest defenders of wild animals, his identity as an official of the Raj was of greater importance, he was a forester, his departmental loyalties ran deep and one does see him coming out in support of the foresters held responsible for over-kill, however he himself abjured hunting. The realization began to slowly dawn at least upon a few that men were more destructive than animals. Even the tiger which was held with great dread and was perceived to be the greatest impediment to the colonial objective of converting the woodlands into their exclusive domain began to be considered not so evil after all and was perceived to be "a large hearted gentleman with boundless courage"[36] by some. Attitudes were changing, though still confined to a few and far between it did herald a new beginning.

S.H. Prater, the Curator of B.N.H.S proposed to set up a special organization to protect wildlife at the Society's Jubilee Meeting held at Bombay, on 10th August, 1933:

"*Whether our reserve forests remain the principal sanctuaries for wildlife in this country or whether in some of the Provinces the purpose is affected by establishing national parks, there is a need for a*

real organization whose sole concern will be the protection of wild animals in these preserves. Our effort to protect wildlife have failed mainly because of the haphazard methods we employ, the lack of any coordinate policy and the lack of any real protective agency to carry that policy into effect. The Forest Department which ordinarily administers the Forest laws has multifarious duties to perform…Experience of other countries has shown the need of a separate and distinct organization whose sole concern is the protection of wildlife in the areas in which it operates.

Further, the existing laws, as now applicable in many of our Provinces, are obsolete. Naturally, their primary purpose is the protection of the forest rather than its wildlife. These laws require consolidation and bringing up to modern standards of conservation. Lastly there is the all-important question of making adequate financial provision for carrying out the work of conservation.

There is a need for creation of a sane public opinion on the subject of wildlife protection in India. At present, such opinion hardly exists and even if it does, in some quarters it may be antagonistic. This is mainly because people do not know, nor has any effort been made to teach them something of the beauty, the interest and the value of the magnificent fauna of this country."[37]

Stanley Jepson in his 'Big Game Encounters' suggested measures which could help in the preservation of wildlife. Not only did he argue in favour of big game sanctuaries for the preservation of wildlife, he also stressed on other measures to save the faunal wealth of India and also emphasized on arousing public awareness about the value of fauna. He commented:

"*…several beautiful works of the Creator, rare species in the rich and varied fauna of India, are threatened with complete extinction and the hand of no man can recreate them. No howl of indignations arises. As the years go by, people seem to grow apathetic to the need of some action to preserve India's fauna for posterity.*

The statutory measures for preservation might include a revision of the Arms Act, the illegalising of traffic in venison, hides, horns, etc., the prohibition of shooting by artificial light except in certain cases, and some action to prevent the abuse of motor cars in the realm of sport. The present game licences might also be revised to afford a further measure of protection to tigers, which arc at present classed as vermin. It would be quite reasonable to ask a visiting sportsman to pay more for his second, third, fourth tiger, etc., if he wants the luxury often unsporting of a big total.

Then there arise the question of game sanctuaries. The formation of these on lines which have proved successful in many countries should surely commend itself to the Government of India without delay…Such sanctuaries should run on scientific game- keeping lines, with effective supervision; otherwise experience has shown that they may merely encourage poaching in out of the way forests.

One of the main benefits such sanctuaries would give would be the arousing of public opinion to the value of India's rich and varied fauna."[38]

A Conference on Wildlife was inaugurated in 1935 and it resulted in the birth of the journal entitled, '*Indian Wildlife*' which was dedicated to the act of preservation of wildlife. The editors of the first volume were Jim Corbett, Randolph C. Morris and Hasan Abid Jafry. The Editorial went thus:

"*We are engaged in changing the mentality of a people, and desire to introduce a new angle of Cision – a new system of thought – an altogether new attitude of mind towards the Fauna and Flora of India.*

Europe, America and Japan appreciate the value of wildlife. They rightly look upon it with pride, consider it a National asset, and spend millions of pounds to save and preserve it. But conditions are different in India; National pride or economic considerations have little to do here. The reason is not far to seek. Religious veneration for 'life in any form', and abhorrence at its destruction, like many other religious dogmas ended in mere passive recognition of a tenet! It failed to create active love for wild birds and animals…Similarly, Muslims in India who have confused the religious permission to 'hunt' in cases of absolute necessity with a free license to kill recklessly for pleasure sake…This produced a strange mentality, and provided unrestricted scope for netting, capturing and killing.

Destructive methods have always been employed in India as elsewhere, but fortunately, the numbers of destroyers and opportunities for destruction have been not too many. Demand for the table was little; firearms were few and licenses for crop protection were almost unknown, and commercial possibilities were definitely. But now, with the introduction of modern firearms, commercial possibilities, gang methods, and the use of motor cars and searchlights, wild birds and animals are alarmingly reduced, and many species are threatened with complete destruction. Game was plentiful and was found in all parts of India; but within the last thirty years, it has passed through the most destructive period in history. It is but a modest estimate that within these years it is reduced by 75 per cent! India is beset with many difficulties. The problem is acute, and unless bold measures are adopted, and movement for protection of wildlife is brought to the forefront, no effort on the part of legislators, sportsmen and friends of wildlife will be able to save it.

India is hopelessly ignorant of the significance of her wildlife, and there is not a single Province or State which is contributing anything or making efforts, to remove this ignorance, and educate public opinion to realize its responsibility towards creatures which have played no small part in making the country fertile and inhabitable, by doing positive service in protection of crop…

We started the Association for the Preservation of Game in U.P. Having done educative work for three years in India, we suggested the formation of All India Conference for the Preservation of Wildlife. The Conference was an unqualified success and was responsible for excellent resolutions but they are on paper and though a year has passed no serious effort has been made in any part of India to give practicability to any of the resolutions.

The Magazine will be the herald of the Conference, and if friends of wildlife in all parts of India will give support to this venture, we are sure that it will soon become a powerful advocate of the cause of wildlife in India."[39]

Voices were being raised to save wildlife but here too, the paternalistic tendencies of the imperial power was very evident, it was conservation imposed from above and it excluded the indigenous people. The decline of game was attributed by most Englishmen to the destruction wrought against them by natives.[40] Hunting without firearms was labelled as cruel: stalking blackbuck with a cart was *rather a poaching way of shikar*.[41] The tribals and peasant hunters were

seen to be competitors and thus sought to be locked out of the forests. The people most affected by the encroachment of forests by the colonial government, were the forest-dwellers, or 'tribal' people, who had lived in forests for centuries. Forests were an integral part of life of these communities. There are several accounts showing how these communities owned and managed the forests.[42] The colonial forest policy rendered them aliens in their own homeland; their practice of shifting cultivation was declared un-scientific and banned wherever possible; produce of their own forests was declared the property of the state; their culture, religion and life-styles were dubbed primitive.

In India the concern for forests and wild animals dates back to ancient times, indigenous groups have long followed their unique customs to preserve and protect wild animals but the culprits held responsible for the alarming depletion of wildlife in the colonial times were predominantly the natives, the Europeans were seldom held responsible for the misdeeds they most often perpetrated. The woodlands of India were gradually sought to be transformed from lawless, chaotic sites into ordered entities, the success of this endeavour may be a subject of debate but what is certain is that a whole new system was inaugurated here to facilitate the requirements of the 'self', in this enterprise, indiscriminate exploitation gave way to preservation and preservation was superseded by conservation, even the term fauna underwent changes to eventually be called 'wildlife'. The earlier presumptions about certain animals were undergoing a change which helped the cause of the animals, the tiger, always painted as a vermin was not thought to be so evil after all. Corbett stated in clear terms that a tiger became a man- eater only when forced to do so. But these voices were only few and far between and at no point in the colonial period was the interest of the rulers made subservient to the cause of wildlife and its conservation.

PRESERVING WILD BENGAL

Formal conservation of forests in Bengal was inaugurated in 1864 with the appointment of T. Anderson as the Conservator of Forests in Bengal. It was not conservation but rather preservation that was introduced because as in the rest of India, the major objective was perpetuation of the resources of the forest to facilitate its unhindered use.The period from the 1890's onwards saw an acceleration of 'managed change' in the forests of Bengal. From the Darjeeling hills to the mangrove swamps of the Sundarbans, from the eastern edge of the central Indian plateau to the tenacious chiefdoms of the Chittagong Hill Tracts, a network of working plans for forest management conjured up regimes of tree and soil manipulation that would add six thousand-odd square miles of Bengal's official forest estate.[43] Modern forestry in colonial Bengal was introduced as part of the colonial project to penetrate, control and eventually command woodland Bengal which was a veritable treasure trove of valuable timber, exotic fauna and minor forest products. In 1868 the Chittagong and western Duars was surveyed. In 1871 the Bengal Forest Rules came into force. Nearly 3000 square miles of forest came under systematic preservation within the first decade of introducing conservancy in Bengal. In the first few years under the leadership of Anderson and then Leeds, efforts were concentrated on north Bengal[44] surveys were carried on in the whole of Bengal and it revealed a bewildering variation of arrangements by which local landowners, tenants, and peasantry used forests,

acknowledged rights, and adjusted competing claims on them.[45] There were however less problematic areas as the forests in the higher elevations of northern Bengal and therefore they were reserved quickly. In the hilly tracts, the regions of medium height i.e. 3000-6000 feet, were given to tea plantations. The areas which were first reserved were those where political or economic complications were the least. By 1875 under the leadership of William Schlich, five forest divisions had been created in Darjeeling, Jalpaiguri, Palamau, Sundarbans and Chittagong. Over the next twenty years direct forest management spread through a network of reserved, protected, and un-classed forests. By 1883 the Government of Bengal had brought 4,322 square miles of forests under the reserved category, by 1900 the area under reservation increased to 5,880 square miles and the total managed area (including protected and un-classed forests) was up to 13,589 square miles. Figure 1 gives a comprehensive graph showing the reserved, protected, un-classed and leased in the Presidency of Bengal in the period 1868 to 1940. As forest administration was tightened, there was also an increase in forest crimes and most often the offenders were natives, the new regulations denied them use of the land that they had traditionally depended on, unable to come to terms with this they frequently defied the new rules. Thus the stage was set for a protracted conflict between them and the colonial power.

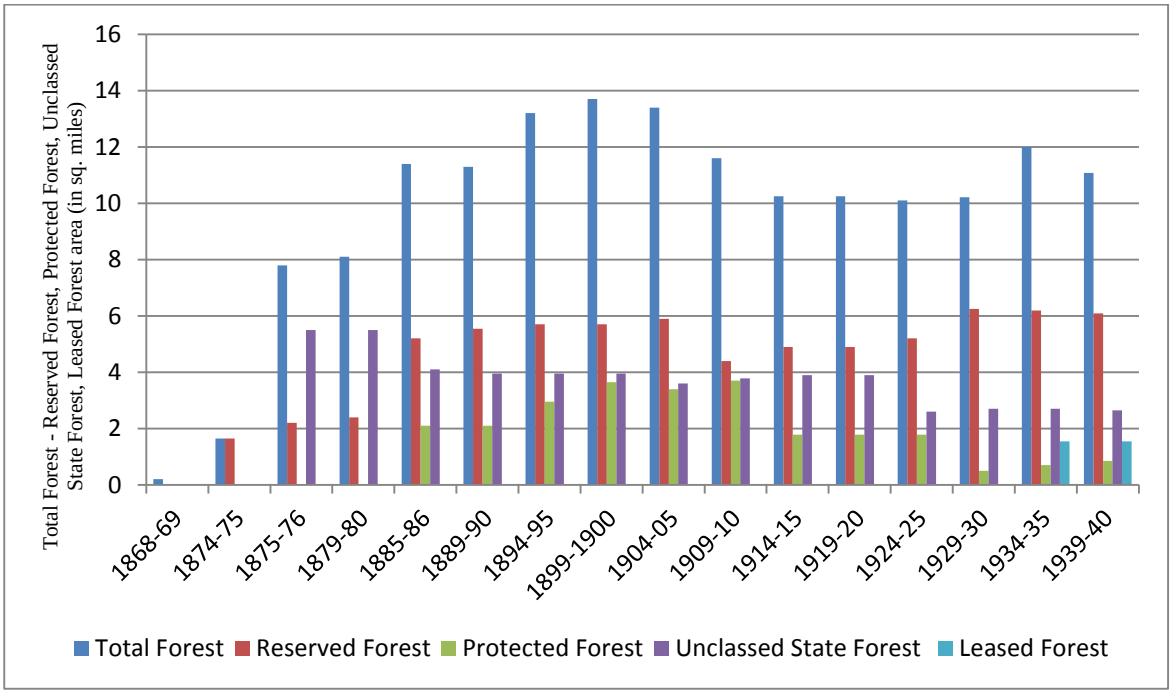

Fig. 1: Total Forest - Reserved Forest, Protected Forest, Un-classed State Forest, Leased Forest in the Presidency of Bengal (1868 – 1940)
Source: BFAR, relevant years

It was not only the indigenous people who impeded the project of bringing woodland Bengal under legislations, managing the wild beasts was a greater challenge, in a rather 'effeminate' Orient the predatory animals posed a serious threat to the Englishman's endeavour, it appeared as if the sahibs had now to confront their most potent enemies and they declared a veritable war against them. Extermination of 'vermin' was taken up in right earnest; reward hunting was adopted to clear the forests of ferocious beasts which dared to jeopardize the colonial project of conversion of the wild into well-ordered forests. Shikar too, fitted perfectly into the colonial enterprise of ordering the woodlands, it served twin purposes; on the one hand it helped exterminate obnoxious beasts on the other it was a leisure activity pursued to provide recreation in an alien land, far away from home.

The forest acts discussed above legitimized resource use and facilitated the colonial project of converting the woodlands into their exclusive domain. The promulgation of laws to annex the wild also gave the colonial power the right to interfere with nature. Forests began to be 'grown', sylviculture being practiced to grow trees 'exclusively for the market'. [46]

"*By forests proper it has been meant land set apart primarily either for the production of timber, fuel and other products of tree growth...*" [47]

"*The forest must be composed only of marketable species; the largest proportion possible if the forest is mixed, being assigned to the most valuable (principal) species, consistent with the realization of all the other conditions.*

It is only by a mixture of species that with annual successive working we can cultivate our more valuable species in the greatest abundance, over the widest extent of country possible, and the finest quality and size. Many of our most valuable species, like teak, Dalbergia latifolia, Lagerstroemia and in many localities even deodar and sal…

Mixed forests as a rule, yield a larger revenue than pure forests, provided of course that the component species are all marketable."[48]

It was the profit motive that dictated colonial policies and the woodlands could not have been exception to the rule. This intervention not only changed the character of the forest cover, it also affected faunal life, certain animals are dependent on specific plants for survival, for example the red panda found in the upper reaches of the Himalayas eat a certain type of bamboo, the clearing of which to make way for more 'marketable' species must certainly have affected their survival. So it was not hunting alone which adversely affected wild animals, substitution of existing species by 'valuable ones', clearing forests to make way for agriculture, in short interfering with the habitat of animals also led to their decline. The introduction of foreign trees was pursued with the same profit motive in mind; this changed the very nature of the woodlands in India. For example:

"*From Australia several kinds of eucalyptus and acacia were introduced in the Nilgiris, about 25 years ago, and the station of Ootacamund is now surrounded by a forest of these trees. At the same time young forests of quinine-yielding cinchona are coming up in many places (in the Lower Himalayas, in Bengal and lower hills of Sikkim). Tea, the existence of which was hardly known in India forty years ago, has become an important annually increasing article of export.*"[49] Whether it was the clearing of mixed forests to introduce monoculture or the introduction of foreign tree species

or the setting up of plantations the result was the same, it did irreparable damage to the Indian eco-system and seriously affected the country's bio-diversity.

I argue it was not really conservation but rather preservation that was adopted in the colonial times. The word 'preservation' means protection but also it also implies 'keep undisturbed for private use'.[50] It was with this private use in mind that the policy of protection was pursued. The early years of the Company's rule had seen the indiscriminate slaughter of wild animals which led to steady depletion and alarm bells began to ring. Sportsmen feared that they would not find enough quarry to continue with their much loved sport in India, so Hunt Clubs, Planters' Associations, Tent Clubs etc. pressurized the government to initiate measures to reserve rights of resource use, it was chiefly to pacify these groups as well as to keep the interest of the colonial regime intact that preservation was taken up in colonial India. Conservation on the other hand discounts all sorts of use, it seeks to protect endangered species from extinction, had that been the primary objective of the colonial power then we would not have witnessed the extinction of the Indian cheetah. In fact true conservation was taken up much later in independent India with the inauguration of Project Tiger in 1973.

The Act of 1878 was a step in the direction of legitimizing the colonial power's quest to convert India's woodlands into their exclusive preserve, the act as already stated classified forests under three heads- the Reserved Forests, the Protected Forests and the Village Forests, the first two categories of forests confined access to the 'self' and either restricted or stopped access to the native 'other'. "*As a matter of fact 'Reserved Forest' is only a piece of government land in which government has taken proper measures to ascertain and record its exact legal position regarding it and by ascertaining and defining the easements possessed over it, to be able to say – such are our obligations, now we know where we are, we can go further and manage our land in any way we think right! And that way may be the provision of whatever supplies the government may desire, whether of timber, or fuel, or fodder, or grazing, or anything.*"[51] It was annexing the wild to exert sole access and proprietary rights over its resources; this was the case in Bengal as it was in the rest of India. The systematic exploitation of the country's natural wealth was undertaken under the garb of improvement, what was done in actuality was the unleashing of mayhem on nature. Bengal was richly endowed and had an enviable variety of big and small fauna. In the Calcutta Division, the presence of large predators was reported till the late nineteenth century but there numbers were fast depleting however smaller fauna abounded till the last days of the colonial rule. In all the other divisions – Presidency, Burdwan, Dacca, Rajshahi and Chittagong there existed varied flora and their woodlands also abounded with both predatory as well as smaller animals. As in the rest of the country these vast resources were sought to be systematically controlled, as the colony had be monitored and all behaviour, attitudes, possibilities and suspicions needed to be registered.[52] and this heralded the regime of reservation in this country.

Hunting regulations in Bengal as in the rest of India came into effect by the Indian Forest Act of 1878, which provided for a close season, the requirement of permits before hunting, snaring or trapping in the reserved forests. This act also included skins, horns, tusks and bones as forest products. The tentacle of imperialism was steadily spreading to encompass everything that was available in the woodlands. Access was sought to be confined to the 'self' and the policy of

preservation proved this without doubt. The first animal that was sought to be protected was the elephant, the Elephant Preservation Act VI of 1879 made the elephant state property. The utility of the elephant in war and peace was discovered, so the colonial state passed a legislation to legitimize its use. "*I am of the opinion that government should publish a definite proclamation asserting its right to control the hunting of wild elephants, and forbidding their capture except by government khedda establishment or under a special license.*

All hunting and disturbing of herds in a large-scale should be formally prohibited, and a fine should be authorized for breach of order and forfeiture of any animal captured or destroyed without good ground or formal permission."[53]

The Collector of Sylhet, H.C. Southerland writes to the Assistant Secretary to the Government of Bengal discussing certain points raised by one Mr. Nuthall:

"*1. An alteration in the form of license or contract, so as to secure for government the half of all elephants above six feet as rent, and that all wild calves should go with their mother.*

2. The adoption of measures to prevent the slaughter of wild elephants simply for their tusks.

3. The maintenance of a kheddah preserve in the district."

"*The second point in Mr. Nuthall's letter raises a very delicate and difficult question. I am aware of no law under which the shooting of wild elephant or the taking away of tusks is a penal offence…If legal measures are necessary, I might with the sanction of the government, issue a notification generally that wild elephants on government kheddahs must not be disturbed or interfered with, and that any disobedience of the order will be punishable under Section 188, Penal Code,… I think I should settle the matter executively by simply giving people to understand that if they are caught poaching in the kheddah preserves, then gun licenses will be taken away… If however the question is to be faced legally, wild elephant shooting must be prohibited by a special legal enactment.*"[54]

Elephants so long decried as a nuisance to agriculture was sought to be preserved and the animals above six feet i.e. the best of them, became state property. However protective laws, exclusion of hunters from forest reserves and government monopoly resulted in a steady increase in their prices, elephants had to be regularly imported from Burma as a result. A clash of interest ensued as foresters were keen on their preservation but the commissary officials, planters and others needed them as beasts of burden. But the most alarming fall out of this preservation was the damage caused to crops because of unrestricted elephant breeding; this led to the use of poisoned spears and other indigenous modes of hunting that the British tried to suppress, by the farmers who were left with no other option in the face of the depredations by the beast. The whole history of preservation would witness this clash of interests but the interest of the colonial state would be upheld in all cases.

The Wild Birds and Game Protection Act, 1887 sought to protect those wild birds and animals which are threatened with extermination. It defined game and empowered Local Governments to declare a close time during which it would be unlawful to capture, kill or deal in any specified kind of game or the plumage of any specified bird. However the Act provided a general exception in favour of the capture or killing of game in self-defence or in protection of crops, and gave power to the Local Governments to apply its provisions to birds other than certain specified ones. Fish was excluded from the Act, as they were suitably provided for in the Indian Fisheries Act,

1897. Since this Act provided for Local Governments to take necessary action regarding birds and game under their jurisdiction, the Commissioners of the various Divisions of Bengal expressed their opinions regarding the extension of the Act in their respective Divisions.

"*Abstract of Opinion on the Proposal to Extend Act XX of 1887, With A View To Protect Insectivorous Birds"*

1. The Divisional Officer of Bengal Proper, Commissioner of Burdwan, Presidency, and Chittagong, are agreed that the extension of the Act to local District Boards would be advisable (150,000 birds slaughtered in 1st year according to Mr. Rainy's calculation.) He adds that a year ago all the kingfishers on the Kernafulli River was destroyed by a gang of bird catchers and the same effect could be produced in respect to other birds. The Commissioner of Burdwan suggests that all shooting from 1st April to 1st September, the breeding season, should be prohibited, and recommends a heavy increase in the fee now imposed on gun licenses in districts like those of the Burdwan Division. The Commissioner of the Presidency Division reports that the feather trade is extensive and would have Government control the orders of the Municipalities and District Boards, as conflicting interests are involved. A copy of the report is appended.

2. The Commissioners of both the Presidency and Chittagong Divisions would leave local Boards, to name the insectivorous birds. On the other hand the Commissioners of the Rajshaye and Dacca Divisions are opposed to any extension of the Act, the former Commissioner being of opinion that there is no great destruction of insectivorous birds in his Division. He however regrets that the White Egret and a species of kingfisher have almost been exterminated in Chittagong. The Commissioner of Dacca considers the proposed extension of the Act to be impracticable.

3. The District Officers of the Division Bengal Proper have varied opinions. In the Burdwan Division, the Collectors of Burdwan and Bankura recommend further legislation but the former asks for a list of insectivorous birds before he can form a general opinion, in order to enable him to ascertain if these are the birds generally sought after by bird catchers for the plumage, while the latter would extend the provisions of the Act to particular birds. The Collectors of Beerbhoom and Midnapore are opposed to the proposed extension of the Act as unnecessary and impracticable, the latter however, at the same time reporting that a man employs annually 30 shikaris in the district for collection of bird-skins and feathers. The Collector of Hooghly is opposed to the proposed legislation as impracticable, and likely to fail from the general ignorance of what are insectivorous birds, but suggests that the fee required un gun licenses under the Arms Act be raised from four annas to rupees five in Districts where, as in Hooghly, there is no fear of the ravages of wild animals. The Collector of Howrah makes the same proposals.

5. In the Rajshaye Division the District Officers of Rajshaye and Rungpore recommend the protection of insectivorous birds, but think that the present Act is sufficient for the purpose. Hundreds of natives are said to visit Rajshaye in the cold weather and to destroy birds for the sake of their plumage. The Collectors of Dinagepore, Bogra, Pubna, Darjeeling and Julpigoree, on the other hand, are more or less in favour of the extension of the Act. The Collector of Pubna, the Deputy Commissioner of Darjeeling and the Deputy Commissioner of Julpigoree, recommend the extension of the Act, to all

birds and would have a close season from April to July. The Collector of Pubna also suggests that no roving-licenses to carry arms should be issued and proposes that fees for licenses should be raised, and the licenses be restricted to a full month before and after the breeding period.
6. In the Dacca Division all District Officers are agreed that the extension of the Act is unnecessary. The Collector of Backergunge would, however, protect a few birds, such as paddy birds, plover and curlew. [55]
The Act of 1887 gave the local authorities certain powers and they interpreted the Act and used it to their convenience. Government officials corresponded with each other regarding this new act and these reveal the points of agreement and divergence between them on the subject. A letter written by A. Smith, Commissioner of the Presidency Division, to the Officiating Director of the Department of Land Records and Agriculture, Bengal reveals the situation in the districts of Bengal:
"*2. …the Collector of 24 Pergunnahs is of the opinion that the provisions of the Act should be extended in such a manner as to permit the Local Government to prohibit the slaughter of any particular kind of birds during the breeding season. When an injurious destruction of useful birds takes place, the Local Government can of its own motion, or on the representation of the people, extend the operation of this Act for the preservation of such birds.*

3. The Collectors of Nuddea, Khulna, and Moorshedabad are all of the opinion that birds are indiscriminately and extensively killed for their plumage as well as for their consumption, and that some measure should be prescribed for the general protection of birds during the breeding season.

6. The Collector of Khulna states that a very large number of gun licenses (some 3000) in force in this district in 1887 indicates what a power for destruction of birds exists. That a majority of these licenses use the guns to shoot birds is notorious. Every sort of bird is shot indiscriminately and at all seasons. That most of these birds are insectivorous is beyond doubt.

7. If the present Act (Act XX) is to be of any use, its scope must be extended so as to protect insectivorous or all birds during the breeding season, and the number of licenses to carry gun should be limited to a reasonable number and except where firearms are needed for killing dangerous wild animals, to persons above the cultivator class.

9. The Collector of Moorshedabad reports that there is no doubt that the destruction of birds either for the sake of amusement or profit has very largely increased of late years. It may be lately asserted that 50% of local gun licenses applied for are solely required to enable the grantees to employ their leisure hours in shooting such birds as the neighbourhood affords. A considerable trade is also carried on in the feathers of birds of the Heron tribe and other birds of handsome plumage and gangs of professional shikaris leave Calcutta yearly on shooting expeditions solely to collect their feathers.

10. Birds of all descriptions are shot at at seasons; most of considered desirable as articles of food, and command a sale if offered in the market.

12. There is no doubt that the destruction of insectivorous birds is being prosecuted in many places to a very injurious extent and that it is desirable to reduce the slaughter. I would be inclined to leave the action (against slaughter) to the (District) Boards; but as conflicting interests are involved, I would vest the ultimate authority in the Government as responsible for all interests.[56]

The above example proves that all segments of the colonial state did not subscribe to the official decision of imposing preservation, the demand for preservation was based on local conditions, it was the various arms of the imperial power that decided when, where and how preservation would be adopted but in case of a conflict of interest the decision of the centre would be abiding on all. No deviations which jeopardized the interest of the colonial state would be tolerated.

ENCLOSING THE WILD

A Notification of 1895 by the Government of Bengal is a clear indication of the English endeavour to enclose wild Bengal.

"*18th May, 1895. The Lieutant Governor of Bengal is pleased, in the exercise of the power conferred by Section 25, Clause (J) of the Indian Forest Act, VII of 1878, and with the previous sanction of the Governor General in Council, to prescribe the following rules as to hunting, shooting, fishing, the poisoning of water, and the setting of traps and snares in the Reserved and Protected forests of Bengal:-*

1. The poisoning of rivers or other waters, the killing of fish by any explosives, the daming and baling of water and the use of small nets to catch fish are prohibited.

2. Subject to the provisions of the Elephant Preservation Act (VI of 1879), no hunting, shooting, fishing, snaring or trapping of any description shall be allowed, save under a license granted by the Conservator of Forests or the Forest Officer in charge of the Forest Division concerned when such officer is not of a rank below that of an Assistant Conservator, to be current for one year from the date of issue.

Provided that the District or Sub-divisional Officer for any forest within his jurisdiction shall have power, or due cause being shown to grant special licenses, to be current for specified periods, for the purpose of destroying any animal of animals dangerous to life.

Provided also, that a Gazetted Officer of Government having jurisdiction in the locality in which any Reserved or Protected Forest is situated shall not be required to take out a license under this rule, but shall apply to the District Officer for a present.

3. No hunting, no shooting, fishing, snaring or permit granted under Rule 2 in the fire protected areas between 1st February and 1st July in any year, without the express permission of the authority granting the license or permit.

4. A license or permit granted under this rule shall not transferrable.

6. (i) any licenses granted under these rules for shooting in a forest may be cancelled at any time by the Conservator of Forests in Bengal, with the concurrence of the Commissioner of the Division in which the forest is situated, if circumstances render it advisable to stop shooting in that forest.
(ii) If any person to whom a license has been granted under the rules commits a breach of any provision of the Forest Law, or any of these rules, the license shall be cancelled in addition to any other punishment to which such person may be liable under the Forest Act or otherwise. C.E. Buckland, Secretary to the Government of Bengal."

FORM NUMBER 1
Forest Department, Bengal
Hunting, Shooting and Fishing License

License to (here enter hunt, shoot or fish, as the case may be) in the (here specify area, Reserved or Protected Forests) granted to:-
Name and Father's Name
Residence
Description
Fee: Rs. 5/- for 1 week, Rs. 10/- for 1 month, Rs. 20/- for 1 year.
Conservator of Forests,
Division.

Conditions under which this License is granted.

NOTIFICATION NUMBER 177 – T.R., 18TH MAY, 1895.

1. This license is issued subject to the Rules to regulate hunting, shooting, fishing etc. in the Reserved and Protected Forests of Bengal, sanctioned by the Local Government, a copy of which must be obtained by the licensee.

2. No person shall shoot at, wound, kill, take or capture the following animals and birds between the 1st of April and 30th of September:-
Deer and Antelope
Hare
Pheasant
Partridge
Hill and Sand Grouse
Pea Fowl

Jungle Fowl
Floricken

3. No person shall shoot at, wound, kill, take or capture any male deer of any kind when in velvet or when hornless, or the female or young of any of the following animals:-
Bison
Sambur
Spotted Deer
Barking Deer
Swamp Deer
Antelope

4. No dry felt or paper wads are to be employed in loading cartridges for use between the 1st February and the 1st July in fire, protected areas when express permission to shoot in such areas has been obtained under Rule 3. Card and jute wads alone are permissible.

5. A breach of any of the above conditions will render this license liable to cancellation.

I, agree to the above conditions which I have read / have been explained to me.

Dated Licensee

Form Number 2
Office of Magistrate of Deputy Commissioner
Hunting, Shooting and Fishing Permit

Permit to (here enter, hunt or fish) in the area described below:-
Granted to
Period of Currency

Dated Magistrate of / Deputy Commissioner District

Conditions under which permit is granted.

1. This Permit is issued subject to the rules to regulate hunting, shooting, fishing etc. in the Reserved and Protected Forests of Bengal sanctioned by the Local Government. A copy of which must be obtained by the Permit-holder.

2. No person shall shoot at, wound, kill, take or capture the following animals and birds between 1st April and 30th September:-

Deer and Antelope
Hare
Pheasant
Partridge
Hill and Sand Grouse
Pea Fowl
Jungle Fowl
Floricken

3. No person shall shoot at, wound, kill, take or capture any male deer of any kind when in velvet or when hornless, or the females or young of any of the following animals:-
Bison
Sambur
Spotted Deer
Barking Deer
Swamp Deer
Antelope

4. No dry felt or paper wads are to be employed in loading cartridges for use between the 1st February and the 1st July in fire, protected areas when express permission to shoot in such areas has been obtained under Rule 3. Card and jute wads alone are permissible.

5. A breach of any of the above conditions will render this permit liable to cancellation.

I, agree to the above conditions which I have read.

Dated Permit holder[57]

These two forms issued by the Forest Department of Bengal, were to be filled and submitted by those who wanted to enter the forests to hunt, shoot or angle. They reveal how the wild frontier was being gradually converted into more predictable entities i.e. into forests which would be guided by a set of laws and where things would be completely controlled by the colonial power. New rules were framed, new strictures came into force, it was mandatory to obtain licences to be able to enter forests, open and close seasons were introduced, all these were done to protect Bengal's woodlands but the actual motive was not hard to discern, it was erecting fences to exert sole rights over them. The woodlands were too precious to be left wild so they were gradually being transformed into the exclusive domain of the colonial state. Preservation in the colonial times needs to be assessed from this perspective too. In spite of enclosing the woodlands by legislations the colonial state failed to sustain its resources, the wealth of the forest was so injudiciously exploited that very soon fears of extinction loomed large but the colonial power was unwilling to accept that it was their

indiscriminate exploitation that led to decline and also reluctant to give up either timber harvesting or leisure hunts. In fact they wanted to tide over the crisis by disallowing access to the indigenous people, i.e. preserve for their exclusive use.

In Bengal the government issued another Notification on 23rd January, 1915. It went thus:

NOTIFICATION NUMBER 839 FORESTS – 23rd JANUARY 1915

JANUARY, 1915. In exercise of the powers conferred by Clause (i) of Section 25 and Clause (j) of Section 31 of the Indian Forest Act, 1878 (VII of 1878), the Governor in Council is pleased to prescribe the following rules to regulate hunting, shooting, fishing, the poisoning of water and the setting of traps or snares within the Reserved and Protected Forests in the Presidency of Bengal.

Rules to Regulate Hunting, Shooting and Fishing within the Reserved and Protected Forests in Bengal.

Prohibition as to Killing of Fish – 1. No person shall within the reserved and Protected Forests of Bengal:-

a. poison any river or other water;

b. kill fish by any explosive;

c. dam and bale water; or

d. use small nets to catch fish.

2. The following close season will be observed within the said forests:-

Rhinoceros, female buffalo and female bison and in the Jalpaiguri District male bison – whole year

Male bison in the other districts – 1st May to 30th September

Hornless male deer or deer when without horns in velvet and females of all deer and antelopes – whole year

Hen florican – whole year

Hare – 1st May to 30th September

All pigeons and peafowl – 1st March to 30th September

Jungle fowl, pheasant, male florican and partridges – 15th March to 30th September

The killing or snaring of any of the above within the close season prescribed in each case is prohibited.

3. Classification of Forests – For the purpose of these rules forests shall be divided into three classes, namely –

Class I – Forests in which hunting, shooting, trapping or fishing is permissible only under a permit in Form A, appended.

Class II – Forests in which hunting, shooting, trapping or fishing is permissible only under a permit in Form B, appended.

Class III – Forests in which all hunting, shooting, trapping is prohibited in order to prevent the extinction of any species, or to form a sanctuary for game, or any other reason.

4. Permits in case of forests falling under Class I: Fees therefor –

In the case of forests falling under Class I, the necessary permit may be granted by the District Officer or the Divisional Forest Officer in Form A appended, on payment of a fee of Rs. 10/-, for the period between the date when the permit is granted and the 30th June, following the date of its issue,

and shall be non-transferable. But except in the Sunderban Forest Division, no permit in Form A shall be held to authorize hunting, shooting, trapping or fishing in any forest between 1st February and 1st July without the express permission of the authorities granting the permit. Whenever such permission is given the fact shall be endorsed on the permit.

5. Permits in case of forests falling under Class II:

In the case of forests falling under Class II, the requisite permit on Form B, appended, on payment of the requisite fee may be granted by the Conservator of Forests, the District Officer or the Divisional Forest Officer.

7. Extension of permit for Class I forests to Class II forests – The holder of a permit in Form A, to hunt, shoot, trap or fish in forests of Class I of any Forest Division may be allowed by the Conservator of Forests to shoot carnivorous animals, barking deer, pig, hare or any of Class II included in the same Division, during the currency of his permit in Form A without extra charge.

9. Exemption in tidal waters – No permits shall be required in fishing in tidal waters.

10. Fees for special permits – Fees shall be charged for special permits issued under Rule 5 according to the following scale:-

To non-residents of Bengal	–	*Rs. 50/-*
Residents of Bengal outside the district in which the forests are situated	–	*Rs. 30/-*
Residents of the district	–	*Rs. 20/-*

11. Charges for killing a bison – In addition to the permit fee, where a permit fee is required, there shall be a charge of Rs. 10/- for the first bison killed and a charge of Rs. 20/- for each subsequent one killed under the same permit.

14. Power of Conservator to make rules as to number of animals to be killed, and to protect immature animals – The Conservator of Forests may, with concurrence of the Commissioner of the Division in which the forest is situated, make rules with regard to forests coming under Rule II:-

a. fixing the number of animals, other than carnivorous animals of any kind to be killed in any Reserved or Protected Forests, and by any permit-holder or party of permit-holders during any forest year(1st July to 30th June); and fixing the number of permits to be granted in a forest under this class in any year.

b. to prevent the killing or capture of immature animals;

16. Permits to shoot dangerous animals – A permit in Form C may be issued free of charge by the Sub-divisional or District Officer or by the Divisional Forest Officer, authorizing the holder to hunt, shoot or trap any specified carnivorous or other animals considered dangerous to life. The permit shall be (a) non-transferable and (b) available for the period specified therein, not exceeding three months.

19. Saving as to elephants – The rules shall be subject to the provisions of the Elephant Preservation Act, 1879(VI of 1879).

<u>In Reverse of Form A</u>

VII. The employment of unlicensed armed beaters except for the purpose of beating out tiger, leopard and bear is prohibited.[58]

The above notification seems to be a major stride forward in the endeavour to protect Bengal's wildlife but if one analyses it in detail then the motive of the colonial state becomes very evident, permits for hunting was a measure to limit the access of the natives. The notions of property rights underwent a transformation during the colonial times, now even uncultivated lands qualified as private property.[59] In the changed circumstances the forest was the private property of the colonial masters, so access and use of it was to be denied to other users, in one stroke the natives became the 'others' in their own land. The forests were an important economic asset. Timber was of course the most important resource but wild animals too were economically viable. Wildlife was commoditized in the colonial period and this intensified the assault on them, wild animals were hunted not only to eradicate vermin or for leisure but they also had a trophy value, if the white man failed to secure a prized animal like a tiger or even a bison he would buy a trophy to take back 'home' to boast about his masculine prowess and reminisce about the 'good old days spent under the Oriental sun'. The fight for survival became tougher for wild animals, selective protection measures made matters worse. There existed a thriving market for exotic plumage, flesh, animal skins, horns, bones, elephant tusks and the natives made use of this opportunity, alienated from their age old means of sustenance they entered into the woodlands 'illegally', killed animals on the sly and smuggled them out to sell them in the black market, it was the case of the closing of the legitimate option and the opening of the 'illegitimate', to sustain themselves. Commented the Collector of Dinagepore:

"*As far as I am personally aware, the paddy bird or egret is the species of insectivorous birds most destroyed in the district for the sake of its crest feather particularly.*"[60]

The Manager of the Chooraman Estate wrote to the Collector of Dinagepore:

"*Numbers of men kill paddy birds, minahs, geese, plovers etc. for consumption, the crest paddy birds specially, for the long wiry feathers sloping from down the back of their heads, are sold to Rajahs…*" [61]

J. Scully, Honorary Secretary to the Trustees of the Indian Museum opined:

"*As far as it is possible to make out, birds are destroyed in India for two purposes only –*

i. for the sake of their feathers, which are exported in considerable quantities.

ii. for eating purposes." [62]

The man-animal conflict acquired another dimension. Animals had to confront a multi-dimensional assault – shrinkage of habitat because of extension of arable, bounty hunting, sports hunting, trophy hunting and now 'illegal' hunting to meet the demands of the market.

A thriving illegal business existed in animals which had a trophy value. Local taxidermists played an important role in this very lucrative enterprise. A.I.R. Glasfurd writes that a Korku (a native) informed him that the natives took the heads and skins of animals to a local taxidermist, 'Ishnaag' and earned a good amount of money. A bison's head fetched Rs. 15/-, a sambhar's Rs. 5/-, a big one's head fetched 7/-, a chital's head a little less. A tiger's skin fetched Rs. 50/-, a panther's Rs. 15/-, a bear's Rs. 4/-, a sambhar's Rs. 5/- to 7/-. Ishnaag in his turn made a fortune with the ware he bought from these natives. He charged Rs. 200/- to 300/- for tiger skin, Rs. 80/- for skin of black bear, Rs. 85/- to 100/- for panther, for the head of a sambhar the charges varied according to the length of the horns, for 35 inches it was Rs. 80/-, for 33 inches Rs. 75/-, for 30½ inches Rs. 65/-, for sambhar

head in velvet and length 29 inches Rs. 60/-. European globe trotters and others wanting to 'flaunt' the little mementos of the 'fine sports they have enjoyed in this country' bought these trophies from people like Ishnaag. [63] In spite of the colonial state's best endeavours the assault on wildlife did not cease, pressures from their partners and collaborators as well as those that they sought to keep outside this domain made it difficult for them to realize the objective of preservation.

The period between 1927 and 1937 was in a way fascinating because there was a remarkable spurt in writing about what was considered as a rapidly developing wildlife crisis.[64] The period witnessed some serious concern about the depletion of species and measures were sought to stem the wrought but the exclusionary logic of protection remained unchanged. The Indian Forest Act of 1927 was enacted with new rules and guidelines, it sought to consolidate and reserve the areas having forest cover, or significant wildlife, to regulate movement and transit of forest produce, and duty to be levied on timber and other forest products. It also defined the procedure to be followed for declaring an area to be a Reserved Forest, a Protected Forest or a Village Forest. It defined what was meant by a forest offence, what were the acts prohibited inside a Reserved Forest and penalties that were to be levied on violation of the provisions of the Act. Bengal too, came under this new legislation, the 'forest line'[65] was getting further pushed back and the control over the wild was getting even more stringent. Forest reserves provided shelter from extension of agriculture, but they were set up for specific purposes: as a covert for deer, a reserve of wood, a place to chase after tigers or to shoot game,[66] in short convert Bengal's woodlands into the exclusive domain of the colonial power. That preservation was chiefly need specific is clearly borne by the fact that the elephant, the first animal to be preserved in colonial India by the Elephant Preservation Act of 1879, no longer enjoyed the immunity from being killed in Bengal from 1932 onwards. The Elephants Preservation (Bengal Amendment) Act, 1932 made it legal to kill 'rogue' elephants. The Act went thus:

THE ELEPHANTS PRESERVATION (BENGAL AMENDMENT) ACT, 1932.

An Act to amend the Elephants Preservation Act, 1879, in its application to Bengal.

Whereas it is expedient to amend the Elephants VI of 1879. Preservation Act, 1879, in its application to Bengal in the manner hereinafter appearing:

It is hereby enacted as follows:-

This Act may be called the Elephants Preservation (Bengal Amendment) Act, 1932.

The Elephants Preservation Act, 1879, hereinafter referred to as the said Act, shall, in its application to Bengal, be amended in the manner hereinafter provided.

To section 3 of the said Act the following clause shall be added, namely:-

"(d) such elephant is proclaimed under section 5A"

After section 5 of the said Act, the following section shall be inserted, namely:-

Proclaimed wild elephants may be killed.

"5A. The Collector or Deputy Commissioner of any District, if satisfied that any wild elephant has become dangerous to human life and property, may, subject to the rules as for the time being be in

force under this Act, issue a proclamation giving a description of the elephant and offering the reward fixed by the Local Government from time to time for killing of proclaimed wild elephants to any person who shall kill the elephant described in the proclamation." [67]

The colonial state by its prognostic, diagnostic and normative judgements sought to enclose the woodlands and make it their private property, hence the 'useful' elephant became a 'rogue', where else a proclaimed 'vermin' the tiger was not so 'evil' after all. The pronouncements changed from time to time, the guiding factors being the threat factor from problem animals or the economic viability of other. The two World Wars wreaked havoc on Wild India, the timber needs of the war devastated the woodlands and thereby on the natural habitat of wildlife added to this was the turmoil leading to India's independence and the position of wildlife was further jeopardized by the lack of adequate protective measures in an era when the wilderness was not a priority for governance.[68]

MAN-NATURE CO-EXISTENCE: THE INDIGENOUS LEGACY

Scientific forestry has never claimed to be non-oppressive; its main claim for consideration is that without such ruthless means the forests would have entirely disappeared in India but this contention is grossly incorrect. The forest cover on the eve of the European assault on India's wilds needs to be delved upon to substantiate this claim. History tells us that at least since the time of invasion of Alexander, India has been famous for her forest wealth. Extensive tracts of this country were wooded till the 18th century. The following comments give us an idea about the luxurious state of forests in India before the British came to India:

"*The forests covered nearly half the area of Northern India. In the Deccan as well as the coastal region, there were extensive forests.*"[69]

"*The tract east of Aravallis was, however, covered with forests even till late into the 18th century, as can be seen from James Todd's travel accounts of Rajasthan in the 19th century.*"[70]

The above statements would be true of most tracts in the country. Not only were there extensive forests, but they also abounded in a variety of species of tress. Brandis noted in his famous book on Indian Forestry:

"*The total area of the British Indian Empire is 1,560,000 square miles that of Europe aggregates 3,800,000. Yet the number of trees indigenous in India exceeds 1,200, while in Europe only 158 species are known. And besides these trees there are 120 species of bamboo and a large number of climbers which play an important part in the Indian forests.*"[71]

The importance of forests was discerned by Indians from times immemorial as is attested by the following:

Gautama Buddha is said to have stated:

"*The forest is an organism of unlimited kindness that makes no demands for its sustenance and extends generously the products of its life activity; it affords protection to all beings, offering shade even to the axe-man who destroys it.*" [72]

G. P. Majumdar has compiled the following extracts from the Puranas about the importance of trees:

The Matsya Purana states:

"*One who sinks a well in a place where there is scarcity of water, lives in heaven for as many years as there are drops of water in it. The effect of digging ten such wells is equivalent to the digging of one pond, and the excavation of ten such ponds is equivalent to that of a lake, and the excavation of ten such lakes has as much effect as that of begetting a virtuous son, and the birth of ten such sons has exactly the same effect as that of planting a single tree.*"

The great benefit of planting trees is described by the Agni Purana:

'*The planting of trees and the construction of pleasure gardens (for the public) are conducive to purgation of sin and enjoyment of property.'*

Varaha Purana enjoins that:

'He never goes to hell who plants an Aswattha or a Pichumanda, or a Banyan, or ten Jasmines, or two Pomegranates, or five Mangoes (Panchamras)'.

A similar verse also occurs in Tithitattva where instead of Banyan, Jasmines and Pomegranates, we have Champaka, Kesara, Tala and Narikela.

A more elaborate injunction describing the particular effects of planting particular trees by the roadside is given in the Padma Purana. …The same authority further tells us that:

'The man planting trees (by the wayside) will enjoy bliss in heaven for as many years as there are fruits and flowers and leaves in the plant he plants…"

The Agni Purana has the following explanatory verses:

"*The man who plants trees bearing fruits and flowers for the enjoyment of the public attains to a supreme state of bliss. The man who plants thirty trees giving shade, fruits and flowers, and ten mango trees, is not destined to go to hell. Gods, demons, angels, seraphs, and the whole of the flying fraternity, beasts, and birds and men - all receive some sort of delight through trees. The Gods get pleasure through flowers, the manes through fruits, and men and birds and beasts through shade. The man who plants trees giving fragrant flowers and sweet fruits is re-born as a result, as a Brahmin in a respectable family enjoying prestige and wealth in a prosperous country. So one should plant such trees and look after them as if they were one's own children which, in fact, religiously speaking they are. The mortal sons are meant for purely selfish purpose whereas the 'tree-sons' serve purely altruistic ones. Leaves and flowers and fruits and shade and roots and barks and wood (timber) benefit others and bring salvation to our forefathers. One should worship trees as one worships a sage free from the vice of envy, because it provides with shade and fruits and flowers even to its very cutter. The all-giving 'tree-son', which does not bear a grudge even to its 'cutter-father'*

out of selfish consideration, brings about the complete salvation to the planter. So the Brahmin should always plant them with due ceremony and treat them as his sons."

The Varaha Purana observes:

"*That (the tree) which is taken for fuel is called 'Agnihotra'; the tree by reason of shade and rest for travellers, the nest of birds, and leaves, roots and barks, etc. for drugs of bodied beings is called a 'panchayajna'. It houses small animals for whom it would have been difficult to build a house. It sheds leaves to give alms, and this is how it ends its sacrifice (panchayajna). It produces fruits twice a year which all the year round are of service to their parents (planter), and there are omens to be understood from the trees. Thus, O son, are they (the trees) to be duly planted, and so the seers know.*"

The Agni Purana then very aptly concludes:

"*Therefore never cut down any tree that bears good flowers and fruits, if you desire the increase of your family, of your wealth, and of your future happiness. If a man cuts down trees near temples, Chaityas and graves, famine, epidemic and drought follow. If one destroys Chincha trees, serious mischief to the monarch is the consequence. If one destroys a boundary tree he dies with his horses; therefore, one should not cut down trees of the region haunted by gods. The supremely wicked man who cuts down trees and thereby stops the passage to wells, ponds and lakes gets his family degraded and even his distant relatives despatched to hell…*"[73]

The association between the original inhabitants of the woodlands and nature existed from times immemorial and folklore and tradition they drew a protective ring around the forests. W. W. Hunter commented that the jungle was their unfailing friend; it supplied them with their means of subsistence – timber, charcoals, fruits, honey, lac, resin, hides and horns, and fur and bones. Their religion, recreation, social life and even medicinal needs were sustained by the forests and this dependence on nature made them devise indigenous methods of protection. The sacred groves and the various taboos regarding wild animals that existed in this country could be taken as the precursor to the policies of conservation. D. Brandis commented that sacred grove were numerous and found nearly in all the provinces of India. These sacred forests as a rule were never touched by the axe except when wood was needed for the repair of religious buildings or in special cases for other purposes.[74] Brandis gives the following description in his book Indian Forestry:

"*Very little has been published regarding scared groves in India, but they are, or rather were, very numerous. I have found them in nearly all provinces. As instances I may mention the Garo and Khasia hills which I visited in 1879, the Devara Kadus of Coorg with which I become acquainted in 1868, and the hill ranges of Salem district in the Madras Presidency examined by me in 1882. Well known are the Swami Shola on the Yellagiris, the sacred grove at Pudur on the Javadis and several sacred forests on the Shevaroys. These are situated in the moister part of the country. In the dry region, sacred groves are particularly numerous in Rajputana. In Mewar they usually consist of Anogeissus Pendula, a moderate sized tree with small leaves… In the southern-most states of Rajputana, in Partabgarh and Banswara in a somewhat moister climate, the sacred groves, here*

called Malwan, consist of a variety of trees, teak among the number. These sacred forests, as a rule, are never touched by the axe, except when wood is wanted for the repair of religious buildings, or in special cases for other purposes. A remarkable little forest of Sal, I found, in 1864 near Gorakhpur. The forest was in good condition; and nothing was allowed to be cut except the wood required to feed the sacred fire [kept by a Muhammadan saint, Mian Sahib] and this required the cutting annually of small number of trees which were carefully selected among those that showed signs of age and decay."[75]

The sacred groves played a pivotal role in the protection of plant species for example in the Midnapore district there still exists the 'Sitabala than'[76] and the Chilkigarh sacred grove[77] where trees are religiously protected by the indigenous people. The Santals zealously preserved the primeval forests. The sal tree was regarded as the most important. It was essential to have four sal trees and one mahua tree in the village and all these trees were dedicated to deities – Maran Buru, Moreko Turuiko, Jahar Era and the mahua tree to Gosae Era. Even today the life of the Santal's is deeply associated with trees and the sal and mahua, which abounded in their original place of residence were revered as Gods and so all care was taken to protect and preserve them. The Oraon call their sacred grove Sarna or Jaher and believe it to be inhabited by Chalapachecho or the old lady of the grove. The spring festival known as Sarhul or Khaddi associated with the sacred grove is observed in the month of Chaitra (April), when the trees are full of new leaves. Cutting down any tree from the Sarna grove is taboo.[78] To the Mundas too, the sal tree is held to be very sacred and the Bah festival is held when the sal flowers blossom. The Mundas have a Sarna grove in the vicinity of the village, believed to be the primeval forest of the tribe. Their tutelary deity Desauli and his wife Jhar Era or Mabura are believed to reside in the grove, the worship of these deities is organized by the priests or shaman. The deities are propitiated in times of calamities.[79] Jahira is the sacred grove of the Ho tribe.

W. G. Archer very lucidly portrayed the importance of the forest in the life of the Santals. It was their place of recreation where they could indulge in the hunt, seek privacy as well as celebrate the annual festival of the Hunt. The Santal songs are replete with their association with the jungle and their communion with the woodlands. A love- sick girl's song goes thus:

"*The osprey's voice is heard on the mountain*
Then the people feel pity
Oh, mother at midnight, the peacock's tail,
Can be seen on the top of the hills
and in the valley.
My brother observes the white flower
Upon the dried up tree,
The parrot has her young ones
Oh, aunt, when will you
Dandle my children,
When will you my aunt?
From the steep sides of the mountains
I hear a pair of flutes

And below in the valley
The beating of a drum."[80]

A Ho song goes thus:
"*How did you hear of the Maghe Parav*
O Dranchu (bird) of the interior forest?
Must have heard by the tune of the flute,
Must be knowing of it by the music of the Sarangi [81]
The relationship between the tribes; the original inhabitants of the forest and their natural world; the forest and the species that reside therein is brought out beautifully by the above songs. This is a relationship based on love and bonds of kinship, which has evolved through years of co-existence between men and the forests.

Tribal societies also hold certain trees in high esteem. Such trees are believed to be the abode of malevolent or benevolent spirits; periodical offerings are given to them. Every Oraon village has a Mychitkha (Ficus religiosa) tree locally known as Hagripipa or Barandapipa to which is offered water in times of drought as it is believed that the offering of water to the trees will bring rains.[82] The Desauli, the malevolent god of the Hos is supposed to reside under a tree represented by a flat stone. The tree is taboo to the tribe. According to the Saora some deities dwell on the trees. Kittung, their god is a lover of trees and weeps when a Saora cut down trees. The Saora consider it a taboo to cut some species of trees like the mango, mahua, tamarind and other fruit bearing trees. The tribe also makes offerings to the Banyan tree during the harvest festival. [83] Bura Deo the principal deity of the Baiga is believed to live in the sal tree.[84]

There are certain festivals associated with trees, for example the Karama festival associated with the Karama tree which is a festival of Oraon maidens who believe that the observance of this festival will ensure the general well being of the villagers and particularly of their brothers.[85] The Karama festival is also celebrated by the Santals. Trees are also associated with life cycle rituals. For example the Oraon tribe has certain rituals associated with the sal tree which is believed to give them procreative vigour.[86] For the Mundari tribe marrying trees is a rite in the course of their marriage ceremony and among the Mundas the bridegroom is married to a mahua tree and the bride to a mango tree,[87] The Malpaharias have a similar marriage ceremony.[88]

The deification of plants is a universal phenomenon and in India the worship of plants and trees is a common feature. The tulasi or holy basilicum has been worshipped by the Hindus since times immemorial. According to the Brahmavaibarta Purana, Tulasi was a gopika, one of the beloved consorts of Krishna. The tulasi plant is also regarded as the incarnation of goddess Lakshmi. Its marriage is performed everywhere with the Salagrama and its leaves are placed in the head of the latter. In the Vishnuyamal Tantra it is mentioned that the Tulasi should be nurtured for three months and then be worshipped. The Tulasi is believed to bless the devotees with plenty of riches, happiness, progeny and virtues. Tulasi is known as the mother also and the plant is regarded as the meeting point of heaven and earth.[89]

The pipal tree is very sacred to the Hindus and also in some tribal societies. The Hindu Trinity of Brahma, Vishnu and Maheshwar is said to live in the pipal and banyan trees. The Buddha was enlightened sitting under this tree. The banyan tree is also held in great esteem by the Hindus and Buddhists. The bel or wood apple is also an auspicious for Hindus and the fruit is called sriphala in Sanskrit. The tree is associated with Lord Shiva. The leaves of the tree are used in various religious rituals by the Hindus. In fact the tree has great medicinal value and has been mentioned by Charaka, the famous physician of ancient India. The mango tree is considered as a totemistic plant among the tribes and it is used in Hindu rituals as well. The tree has significant medicinal value.[90] The sacredness of the trees saved them from the axe from times immemorial and thus helped in the process of preservation.

Certain animals were considered taboo by certain tribes, then there were the totems which were protected, all these practices which were followed represent the most important ecological heritage of our ancient culture. Mrs. Collin Mackenzie visiting India in mid-nineteenth century recounts:

"*We entered the Parvati Jungle, about 24 miles in length, which abounds in tigers…We asked if the gentlemen near did not go into the jungles to shoot tigers? They said,'No; the forest was under the protection of the Goddess Parwatti and she has given no'hukum' that the tigers should be destroyed.*"
[91]

Then there are safe sanctuaries like 'Vedanthangal' near Chennai. The Tamil traditions claim that the water birds that throng the area in certain seasons have been nesting there for over eighteen centuries. In fact Vedanthangal is not an exception because throughout India the arrival of the monsoons not only mark the nesting season but it is also the time when water birds find safe sanctuary in sites such as these and they are not protected by government agencies but by the indigenous people. [92] The sacred groves and nesting colonies of wading water birds are not a panacea for conservation but they do point to cultures of co-existence.[93] The taboos in many parts of India regarding the killing of certain species of animals are indeed fascinating. The tribal peoples of Thane near Bombay (Mumbai) rarely molested the wild dogs despite being offered large cash rewards by the English. The Kolis valued the packs for curbing the number of deer and chasing away tigers that often lifted their valuable cattle. The bounties offered by the colonial government to kill tigers could not persuade the Baghel Rajputs in central India to help in the pursuit of the big cats as the community claimed descent from the tigers. Wolves and sloth bears were left alone by the villagers in Salem, Tamil Nadu as religious beliefs precluded any assault on them even if the animals caused harm to their live-stocks or cultivated fields. Notions of sacredness could have a utilitarian aspect and an aesthetic touch. Peacocks, zealously guarded from hunters, also rid the field of insects, pests and snakes.[94] In colonial India the elite hunters were impressed, at times, by the efficacy of grassroots protection. A veteran hunter on a hunt in the hills of Kumaon wrote of a place called Debi Dhaura: "*The piece of jungle must be full of game. A pity more of such sanctuaries cannot be established in many parts of the country."*[95] Co-existence was often a part of daily practice in India though the taboos were not timeless or inflexible. Sanctions were not universal, often animals protected by one group was killed by the other. Neither were the sanctions sacrosanct often when there was a clash of

interest between man and beast the interest of the former prevailed but there was co-habitation in most places, even though there were fatal conflicts life would go on.[96]

The colonial period increasingly reduced this scope of co-existence by transforming more and more woodlands into arable and by indiscriminately using forest resources; both flora and fauna. When conservation became imperative in the wake of the destruction wrought by an industrial capitalist society, the natives were targeted as the culprits and sought to be kept away from the site they had been using since the earliest of times. The age old claims of the natives were made illegal and they were condemned and held responsible for destruction of trees and wild animals. The Criminal Tribes Act was passed in the context of the colonial forest policy. It is not difficult to establish a correlation between the exclusion of the forest people and the act. For example, the Lodhas of Midnapore, who eked out a meagre existence from the forest, were termed a criminal tribe in 1916. The depletion of forest resources at the hands of the indigenous people was negligible in comparison to the havoc caused by the colonists. The natives knew how to recycle forests as is evident from the following song:

"*Let us plant mango and*
Palm trees my brother,
Let us enclose a tank
my brother that we may be remembered
And on top of the embankment
May the sasung bird sing."[97]

The voice is of preservation, the call is for afforestation and the fervent prayer is to let the birds and even the beasts live unhindered in the forests.

The conservation policy or rather the policy of preservation pursued in colonial India failed to integrate the indigenous customs and beliefs into it and the same policy continued even in post colonial India. The denial of access to livelihood resources to the resident people of the forests were resented by them, the way forward perhaps lay in integration and participation of the indigenous people in forest management and conservation. For preservation or the conservation of biodiversity, the practice of forest management in a scientific way should have been integrated with the practise of traditional management of the indigenous people, particularly the tribals. However in colonial India the exclusionary logic of preservation was adopted in which the native voice went unheard. Preservation was need based and not based on the altruistic motive of saving the fast declining plant and animal species. The priorities of colonial forestry were essentially commercial in nature[98] hence the depletion of trees and wild animals went on unabated. The colonial state faced a strange dilemma because of the inner contradictions in its forest policy, the question was not about whether to consume or not to consume, it was about how much to consume. The fine line between measured exploitation and excessive use often got blurred and India's woodlands continued to be decimated.

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CHAPTER SEVEN

CONCLUSION

The work begins with the coming of forest management to Bengal and the introduction of legislations to the 'jungles' which were perceived as regions of chaos and disorder. It was imperative to control the 'wild frontier' as it was an integral part of the colony. This compulsion led to the promulgation of laws to facilitate the extension of governance in this site. This is what has been called 'statemaking'.[1] However, even though the laws were passed for the whole of British India, in each province the ramifications of the laws were different as they were re-moulded and re-drawn to suit the needs of the specific province. Bengal as a province differed significantly from the United Provinces or even the Central Provinces, so the measures taken to exert authority over her wild would be different from those taken in the other provinces of British India. This was an important reason as to why it was impossible for the 'state' to control all its fragments from one centre, as the same laws translated differently in the different segments of colonial India. The English experience with Bengal was therefore unique and specific to this province.

The work tries to establish that the wild was as important a site as others in colonial India where the state desired to wield direct control because this was an important sector of the economy, a region which was economically lucrative and so the state was keen on establishing sole control over it. If the state could not assert monopoly over the resources of the region then at least it should be in a position to dictate terms to others. The context in which imperial control was sought to be exerted in the woodlands of India is assessed in this perspective. The coming of the forest administration in India was therefore primarily aimed at creating an exclusive domain of resource use and in this endeavour if the colonizer faced any challenge then that was taken head on and dealt with accordingly.

The greatest obstacle to the imperial power's realization of the objective of enclosing the woodlands came from the ferocious *beasts* and it was with them that the greatest battle was fought in wild India. The imperatives of an agricultural society made clearance of forests and grasslands an inescapable reality; therefore a conflict with wild animals was unavoidable. The English were ready to confront the challenges in the woodlands but what they had not envisaged was that the challenge here was far more formidable than those that they faced in the rest of India. The jungle could not be easily subdued nor could it be easily penetrated neither could the ferocious wild animals in it be easily overpowered. This was in complete juxtaposition to the Englishman's experience elsewhere in India. The 'other' India in contrast could easily be assaulted, looted, plundered and dominated. It was vulnerable and could be used and abused as they desired. It was 'docile' and 'effeminate' and hence could be easily mastered. It was the Indian jungle alone which had the element to match the valour of the 'masculine' Occident.

Masculinity is a construct which is inextricably tied up with the concept of power. In a patriarchal society men are always in command, hence, the colonial authority which projected itself to be 'masculine' needed to be in command of the Indian jungle. But here it encountered a major

obstacle because the Indian wilderness could not be easily subordinated and made subservient to the dictates of the imperial power. This challenge was seen as a major threat to the invincibility of the 'sahib', he had to establish his dominance and mastery over the wild and one way of doing so was through 'shikar' or hunting. Shikar was not merely an adventure sport which provided entertainment to the lonely English official in an alien land; it was also used to prove his masculine prowess and superiority. A sahib in hot pursuit of a ferocious wild animal, braving the dangers of the jungle and ultimately slaying it was indeed an embodiment of 'manliness'. The various methods of shikar pursued by the English in India: the *howdah* shikar, shikar from *machans*, pursuing animals in a *chase* or through stalking were all aimed at asserting the insuperable might of the English. To proclaim themselves as the super-ordinate authority of the woodlands these manifestations of invincibility were essential as by these the natives would be over-awed and would be forced to accept the imperial intervention and decision making in the woodlands.

During shikar the most ferocious of the beasts were sought, as killing the deadliest and most dangerous re-inforced the aura of invincibility so passionately desired by the sahibs. Comments C. E. Gouldsbury, '*... tiger, leopard and bear- in the order named- were the only animals that I cared to hunt, or which afforded me any genuine satisfaction to kill;...*'[2] In the first few years of their rule they were successful in nearly wiping out the Asiatic lion and confining it to a small pocket in western India. Cheetahs were hunted so extensively that they became extinct. Panthers, leopards, bear, wolves and wild dogs, all that threatened the English notion of 'order' were pursued with the avowed objective of extermination. Poisonous snakes threatened human lives so they were killed with impunity, rampaging herds of elephants, birds like parrots and sparrows caused harm to agriculture so they were killed. The English were the masters, so the destiny of man and beast lay in their hands. There was one animal with which the English had a special relationship- the tiger. The animal exuded power, it was the king of the jungle and the control and command of the jungle could never be complete without complete subjugation of it but the tiger was difficult to overpower. The jungle was its territory and it was difficult to command the beast in its domain.

The Englishman's fascination with the beast is evident; diaries, memoirs travelogues are replete with tales of the tiger found abundantly in the jungles of India. The danger that lurked from it both real and imagined is a constant factor that one is confronted with when delving into the history of the Raj's relationship with wild India. Of the many stereotypes constructed about the orient there was also a stereotyped image of the tiger, a 'vermin' which disrupted order and therefore it was absolutely justifiable to kill it. Killing a tiger served two purposes one it established beyond doubt that the English were the masters. A very common photograph of a sahib shikari is the one in which he stands with rifle in hand, one leg resting on a killed tiger and natives crouching below, one look at this and any doubts about the masculine prowess of the white-man is laid to rest. Secondly the dead tiger had immense trophy value. Taxidermists like Van Ingen and Van Ingen or Tocher and Tocher would make life-like trophies of the killed beasts and the sahibs would display the same in their drawing rooms, a memento to their valour and courage as also the exciting years spent in the forests of India.

The Raj's government did not use force alone to govern India, they came up with various ideologies to legitimize their rule; one such ideology was paternalism. A patriarch is the protector and also the chief decision maker in the family. It is accepted that he knows what is best similarly the English knew what was best for the Indians. The role of the protector or saviour, 'mai baap' in local parlance could best be played in case of a cattle lifter or man- eater. Man eaters were often invented to fortify the image of the protector, it was much more evil than an ordinary tiger because it had the audacity to venture outside its' domain and attack cattle and men. Writes C.E. Gouldsbury, of the Indian Police Service:

'*Often, too, while seated in a morning under a tree- the distracted owner of a cow or buffalo, killed during the night and dragged into an adjoining jungle, would come running in himself, and grovelling at my feet, insist on "the preserver of the poor transferring his august presence" to the scene of the disaster and slaying the "bagh" at once! I seldom declined these invitations, for the destruction of dangerous game was, told a part of my business.*'[3]

Here was a sahib responding to the call of the hapless native, a protector rescuing the helpless from the clutches of an evil beast. It conformed to the recognizable paradigm of the 'masculine' white shikari responding to the call of the weak natives and taking charge of the bad tiger.[4]

Law and order was held to be sacrosanct as it was thought that this was imperative for improving the largely uncivilized Indians, this was relatively easy to achieve in the rest of India but a rather difficult proposition in the jungle. But no matter how difficult the task, the English pursued it single-mindedly and this brought them into conflict with Wild India. The conflict was the most intense with the tiger as it was the most difficult animal to order. The English irresolutely pursued their objective of removing all impediments on the path to the realization of their mission; they ruthlessly butchered the tiger as they found that it was from this animal that the challenge to authority was the greatest. On finding it difficult to exterminate the 'pest' alone, they roped in natives and announced rewards to kill the beast, the multi-pronged assault brought it almost to the brink of extinction.

It is undeniable that the tiger was one beast with which the English were besotted but the other big game animals too, fascinated them especially those animals which had trophy value. Animals which proved to disrupt order and cause harm to agriculture or threaten livestock were also hunted but this was a hunt of a different genre, it was pursued not for pleasure but as an act of necessity and compulsion and in this the help of the natives was sought as that would ensure a quicker resolution of the problem. Reward hunting was introduced to induce natives to kill problem beasts; this was a master-stroke of the colonial government as lured by the reward and assured by the state that the killing of animals was a legitimate act, the natives embarked on the mission with unflinching resolve, causing irreparable loss to the faunal reserve of the country.

The assault on wild animals in Bengal was carried on with the same vigour and intensity as the rest of India. There was however a difference, that of the dread factor from beasts; for example in the Lower Provinces, pigs were a menace so not only was pig-sticking a very coveted sport, pigs were also killed for threatening crops. It was remarked that: '*Wild pigs too often make themselves intolerable to cultivators, who driven to despair and wrath, fires the forest home of the black*

enemies.'[5] The case of the elephant was even more interesting, the animal was the first to be protected in British India but in Bengal they had increased in such great numbers that they threatened the interest of cultivators, so the Elephant Preservation (Bengal Amendment) Act, 1932 was passed legitimizing the killing of those wild animals that had become dangerous to life and property. There was also a great difference in the variety of wild animals found in the different districts of the province and they were protected or exterminated to suit the interest of the colonial power. It was difficult to follow a uniform policy throughout British India as the local differences too needed to be heeded in the interest of prudent governance, so the state took decisions and implemented policies by also taking the micro-region into consideration, this is evident in the case of extermination of beasts as well as in the case of their protection.

By the middle of the nineteenth century the process of consolidation of the rest of India was nearly complete, however wild India remained a chaotic site so the process of bringing it under the legislations was taken up in right earnest. The project of enclosing the wilds began with the setting up of the Imperial Forest Department in 1864 and this was followed by the Forest Acts of 1865 and 1878. The acts were intended to convert the *jungles* of India into forests in the model of the forests that existed back home as that would serve the twin purposes of creating an exclusive domain where the demands and needs of the colonial state would be accorded first priority as well as establish the English as the magnanimous redeemer who took up the burden of converting an indisciplined site into a disciplined one.

The legislations that were adopted for woodland India till 1947 were all primarily aimed at maximization of resource use by the colonial state. The regime of protection that legislations inaugurated was also driven by the same motive, trees and animals were sought to be protected in the interest of the imperial power: trees for the unabated supply of timber and animals for the continuity of the best loved sport: shikar, in a land otherwise unattractive because of its heat, humidity, squalor and disease, that this saved many plants and animals from extinction was undeniable but one needs to keep in mind that it was the English assault that led to a wildlife crisis as well as loss of verdant natural vegetation of the country. Conservation discounts resource use to save plants and animals from extinction but this was not the case in colonial India, the policy adopted was preservation i.e. saving species for future use. What preservation tried to achieve and what it eventually ensured was monopolistic rights over the forests of the country which guaranteed the sole rights over timber and animals to the English. The rights of the natives who were the traditional users of the resources of the forest were not acknowledged; in fact they were condemned as culprits responsible for the depletion of trees and animals. Thus the conversion of the jungles into forests was sought to be achieved by excluding the indigenous people from it and this was the primary drawback of the endeavour because the natives could never reconcile to their altered position in the forests, whenever they found the opportunity they entered the forests and used its resources. In fact colonial India threw open greater income opportunities as newer avenues of money making both legal and illegal evolved. The market for animal trophies, hides and skins as well as exotic bird plumage was huge and the natives generally debarred from participating in the legitimate trade in these items turned to the grey market

and made huge profits. Hence the exclusionary logic of preservation failed to achieve its objective and the tussle with the wilds continued till the last days of the Raj.

There was a pan Indian policy followed to control and command the woodlands of the country but within the broad macro-framework certain regional or local issues needed to be incorporated to make the enterprise more effective. It is in this context the experience in colonial Bengal needs to be assessed and understood. For example the sprawling grasslands of Gangetic Bengal needed to be cleared in the interest of agriculture but this resulted in intensification of the man animal conflict, the region being the natural habitat of the tiger and many varieties of deer. Pushed out of its territory the tiger started to invade the domain of man and so its extermination became the avowed mission of the state, rewards were constantly increased to kill the animal and this continued till the danger from the 'vermin 'did not subside altogether. Even within the province of Bengal the rewards announced to exterminate 'vermin' varied between districts and this was because the dread factor or possibility of harm from them differed in different regions. In the case of the measures adopted for protection, the Bengal micro-region witnessed the imposition of policies to suit the local conditions. Hence the restrictions on timber use or on hunting were altered according to local requirements.

The 'ordering' of Wild Bengal was a part of the larger imperial agenda of 'ordering 'Wild India. The Wild was an integral part of the country so it was imperative to annex this site and impose legislations here to 'improve' it, just as it was imperative to 'improve' the rest of the country. However here the English faced the greatest challenge as it was indeed an uphill task to rein in the wild animals that roamed the jungles what ensued was a protracted warfare in which the casualties suffered by the animals was much greater than that suffered by men in the rest of colonial India. This aspect of colonialism had remained a largely neglected area only to be taken up seriously by scholars from the 90s of the 20th century. The present work has tried to take this tradition forward by concentrating on the micro-area of linguistic Bengal.

Notes and References
Chapter Seven

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2. C. E. Gouldsbury, *Tiger land: Reminiscences of Forty Years' Sport and Adventure in Bengal*, London, 1913, p. 158

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