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EMPIRE, ECOLOGY AND CONTROL: COLONIAL FOREST POLICY AND THE EARLY DISCOURSE ON WILDLIFE PRESERVATION (1865-1887)

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Abstract

This paper examines the contradictory forest and wildlife policies of the British colonial administration in late-nineteenth-century India. While the state pursued systematic extermination of wild animals through the vermin eradication programme, it simultaneously introduced measures for forest conservation and selective species protection. These policies were driven less by ecological concern than by the material demands of the empire, railways, naval construction, and infrastructural expansion, as well as the political imperative of consolidating control over forest-dependent communities. As Guha notes, organized forestry in colonial India primarily served imperial interests and revenue extraction. To this end, vast tracts of forests were cleared for agricultural and plantation expansion, while wild animals deemed obstacles were systematically eliminated through state-sponsored bounty schemes (Gadgil, 1995). This contradictory regime not only reinforced colonial authority but also produced lasting ecological imbalance.

Introduction

The second half of the nineteenth century marked a decisive turning point in the history of forests and wildlife in the Indian subcontinent. Colonial forest policy, initiated with the Charter of 1855 and institutionalized through successive Forest Acts of 1865, 1878, and 1894, sought to bring India's vast woodland resources under the firm control of the British state. While ostensibly framed in the language of "preservation," these policies were less concerned with ecological balance than with the imperatives of empire, securing timber for railways, protecting revenue sources, and controlling forest-dwelling populations who were increasingly portrayed as threats to both order and profit. Within this emerging regime, forests became both strategic assets and contested landscapes, shaped by the dual objectives of economic extraction and political consolidation. At the same time, a parallel discourse on wildlife preservation began to take shape. This early concern for animals was not rooted in a modern ecological ethic, but in the intertwined priorities of sport, subsistence, and imperial utility. Select species such as elephants, deer, and game birds were granted protection because of their military, economic, or recreational value, while carnivores, viewed as vermin that threatened livestock and game populations, were systematically exterminated. Associations such as the Nilgiri Game Association (1877) and the Bombay Natural History Society (1883) played an important role in shaping legislation, including the Elephants Preservation Acts (1873, 1879) and the Wild Birds and Game Protection Act (1887). Yet their influence remained circumscribed by colonial interests, which privileged the needs of planters, officials, and the global trade in skins, tusks, and feathers over ecological preservation. This paper examines the intersection of colonial forest policy and the nascent discourse on wildlife preservation in India between 1865 and 1897. It argues that both were shaped less by ecological considerations than by the imperatives of empire like, timber extraction, military utility, revenue generation, and elite recreation. By tracing the evolution of legislation, institutions, and associations, the study highlights how "preservation" under colonial rule operated as a mechanism of control, simultaneously displacing local communities from their traditional resource use and restructuring human–animal relations to serve imperial ends.

Colonial Forestry and the assertion of State Control

By the mid-nineteenth century, the East India Company grew increasingly concerned that uncontrolled deforestation might create a timber shortage severe enough to necessitate imports from abroad. It was against this backdrop that Lord Dalhousie issued his famous memorandum of 3 August 1855, known as the Charter of Indian Forests, which marked the first formal attempt by the colonial state to assert control over forests and initiate systematic management (Parween, 2012). Although the 1855 memorandum represented a landmark moment, official interest in forest conservation dated back to the early nineteenth century. In 1806, Captain Watson was appointed the first Conservator of Forests in the Malabar-Travancore region (Bandhopadhyay, 2010). During the 1820s, Nathaniel Wallich, Superintendent of the Calcutta Botanical Garden, voiced strong objections to deforestation and warned of its ecological consequences. Other officials also contributed to the cause, including Collector Conolly of Malabar, Dr. Gibson (who founded the Bombay Forest Conservancy), Lieutenant James Michael of Annamalai, Colonel Pearson of the Central Provinces, and Dr. Hugh Cleghorn of the Madras Presidency. Cleghorn, often called the "father of Indian forestry," stressed the need for scientific management and highlighted the dangers of reckless exploitation (Brandis,1994). The advent of railways in 1853 further intensified state interest in forestry. The rail network, which extended from just 32 km in 1853 to 7,678 km by 1870, consumed vast quantities of timber for railway sleepers, accelerating forest depletion (Haeuber, 1993). Since England had already exhausted most of its own forests and relied heavily on colonial timber, Indian forests became a critical resource for the metropole. Recognizing both the economic stakes and the absence of technical expertise in Britain, Lord Dalhousie invited the German forester Dietrich Brandis (1824–1907) to India in 1853. In 1856, Brandis was appointed Superintendent of the Pegu teak forests in Burma, where he laid the foundations of what came to be known as scientific forestry. Although the Revolt of 1857 temporarily disrupted conservation efforts, but Brandis continued his work in Lower Burma. By 1862, the growing scarcity of timber, particularly for railway construction, convinced the colonial state of the urgent need for a centralized forest administration. Under the initiative of Secretary of State for India Charles Wood, and with the active support of Brandis, the Indian Forest Department was formally established in 1864. In recognition of his pioneering role, Brandis was appointed the first Inspector General of Forests (Saldanha, 1996). The establishment of the Indian Forest Service in 1867 further professionalized this enterprise, with many officers trained in German forestry schools.

Yet, the rhetoric of "conservation" masked a very different reality. Scientific forestry in India prioritized monocultures of commercially valuable species such as teak, sal, and chir pine, while discouraging traditional practices like shifting cultivation (jhum), fuelwood collection, and communal grazing. This not only undermined biodiversity but also disrupted the livelihoods of forest-dependent communities. The systematic curtailment of customary rights turned independent cultivators, grazers, and hunters into trespassers and criminals in their own homelands. Forest laws institutionalized this process: the Indian Forest Act of 1865 gave the state legal authority to appropriate forest land, while the much harsher Act of 1878 classified forests into Reserved, Protected, and Village categories, severely restricting access. The later Indian Forest Act of 1927 consolidated these powers, enshrining the alienation of forest dwellers from their environment. The social consequences were far-reaching. Forest-based communities, including Adivasis, pastoralists, and peasants, faced dispossession, loss of livelihoods, and increased surveillance. Resistance was widespread, ranging from petitions and protests to armed uprisings such as the Santhal rebellion, the Gond struggles, and later forest satyagrahas in Kumaon and Bastar. In this sense, colonial forestry was as much about political domination as it was about resource management. Colonial forest policy must also be

understood in its global context. India became a laboratory for the transplantation of German forestry practices into the tropics, and the Indian Forest Service served as a training ground for foresters who later exported these methods to Africa and Southeast Asia. The experience of managing Indian forests thus shaped international environmental governance, influencing the evolution of forestry as a modern scientific discipline. Economically, Indian forests were woven into the fabric of global capitalism. Timber supported railway expansion, which in turn facilitated the extraction of other resources. Plantation crops such as tea, coffee, cinchona, and later rubber were cultivated on cleared forest land for export to world markets. Forest revenue became a vital component of colonial finance, reinforcing the role of forestry as a tool of empire. Thus, the forest policy of the British colonial state in nineteenth-century India cannot be understood simply as a project of conservation. It was, above all, a system of control—over land, resources, and people. While the rhetoric of scientific forestry invoked rationality and sustainability, the underlying motive was the maximization of imperial profit and the consolidation of state authority. Its ecological legacy was monoculture plantations and biodiversity loss; its social legacy was the dispossession of forest dwellers; and its global legacy was the export of an extractive forestry model across the colonial world.

Colonial Encounters and the Early Ideas of Animal Preservation in Indian Subcontinent

"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 to endanger such trees, shrubs, and plants; by prohibiting the collecting and removing of leaves, fruits, grass, wood-oil, resin, wax, honey, elephant's 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 authorized roads and paths; by prohibiting cultivation and the burning of lime and charcoal, and the grazing of cattle within such forest"(Stebbing, 1922; Brandis,1875).

The Indian Forest Act of 1865 contained a provision relating to wildlife that reflected the priorities of the colonial state rather than genuine ecological concerns. For the first time, the Act prohibited the collection of elephant tusks as well as other animal horns, hides, and skins. At the same time, the legislation severely restricted the access of local communities to forest resources. Shifting cultivation and the collection of forest produce, which had long sustained forest-dwelling populations, were rendered illegal, while entry into reserved forests and movement through forest corridors was permitted only along authorized routes. These measures suggest that the underlying objective of the Act was not the preservation of forests, but rather the displacement of local populations. Forests had served as important hideouts for rebels during the Revolt of 1857, and their control became a matter of strategic importance for the colonial administration. In the 1860s, growing concern over the decline of game animals in the Himalayas brought the issue of wildlife preservation into sharper focus. Responding to representations in the Indian press, the government imposed a seasonal ban on the hunting of "useful and ornamental birds" during their breeding period, from April to August. Professional native hunters, who depended upon the sale of bird meat, skins, and feathers, were blamed for the decline of these species (Carey, 1870). This logic was typical of colonial discourse, which frequently targeted indigenous subsistence practices while leaving elite recreational hunting unchecked. A similar seasonal ban was later enforced in the Nilgiri forests of South India. In 1871, following sustained pressure from the press, the then Governor of Madras, Lord Napier, introduced a "Game Act" that prohibited the hunting of certain animals, including bison, sambur, ibex, and barking deer, during the closed season (1 May to 1 October). Nevertheless, exemptions were granted to planters and Ryots, who were permitted to kill deer at any time if they caused damage to crops or plantations (Shikari, 1888). It is significant that both these

measures excluded carnivores from the ambit of protection. On the contrary, predators such as tigers, leopards, and wolves were exterminated on a massive scale. Colonial officials justified this policy because carnivores depleted the populations of herbivores, thereby threatening the meat supply of the British as well as the availability of game for sport. The result was large-scale slaughter: between 1875 and 1925, over 80,000 tigers, 150,000 leopards, and 200,000 wolves were killed (Thapar, 2006). Official records indicate that between 1879 and 1888 alone, 16,573 tigers were hunted (Rangarajan, 2012). Such figures reveal the paradox of early colonial "conservation," which sought to protect select species for elite consumption and recreation while simultaneously sanctioning the eradication of others.

Following the limited success of these measures, the Madras Government passed the Elephants Preservation Act of 1873. This legislation prohibited the killing, injuring, or capturing of elephants without authorization). However, the purpose of this Act was primarily utilitarian rather than ecological (Thapar, 2012). Elephants were indispensable to the colonial state, employed in clearing jungles, carrying loads, transporting soldiers and supplies, and hauling timber from forests to depots (Singh, 2016). As Sir Sydney Cotton observed, an elephant could carry as many as six soldiers along with their arms, ammunition, bedding, and rations across long distances (Nongbari, 2003). To ensure a steady supply, the colonial government captured approximately 2,000 elephants annually through the establishment of keddahs, large stockades used to trap wild elephants, in Dhaka and Mysore. At the same time, the expansion of coffee, cardamom, and tea plantations led to the rapid destruction of elephant habitats (Rangarajan, 2001). In practice, the Act often worked to the advantage of European planters and local landowners, who were freed from restrictions to facilitate agricultural expansion. Moreover, elephants became an emblem of colonial authority and prestige. British officers frequently used them for travel through dense forests, as well as for tiger and big-game hunting, where the elephant's size and strength offered both mobility and safety. Thus, while framed in the language of preservation, the policy of protecting elephants was motivated less by concern for the species than by their practical utility and symbolic value within the colonial enterprise. This early phase of wildlife legislation in India reflected broader patterns within colonial governance. Laws such as the 1865 Forest Act and the 1873 Elephants Preservation Act were framed as measures of conservation, yet their deeper logic was to facilitate the extraction of resources and the control of populations. They also mirrored global developments: similar "game laws" were enacted across Africa and Southeast Asia, where colonial powers simultaneously restricted indigenous hunting and promoted elite sport hunting as a marker of authority. The ecological consequences of these policies were far-reaching. By privileging monocultures and the protection of select game species, colonial interventions eroded biodiversity and destabilized ecological balances. By criminalizing shifting cultivation, grazing, and hunting, they severed longstanding relationships between local communities and their environments, reducing indigenous knowledge systems to "poaching" in the eyes of the law. Moreover, the extermination of predators created cascading ecological effects, including the unchecked growth of herbivore populations in some regions and the loss of keystone species such as the tiger.

In sum, the early colonial discourse on wildlife preservation in India reflected a complex interplay of strategic, economic, and recreational concerns. Far from constituting a genuine conservation ethic, these measures sought to regulate wildlife in ways that reinforced state control, secured resources for imperial needs, and safeguarded elite hunting interests. The so-called beginnings of preservation were, in reality, deeply entangled with exploitation and exclusion, laying the foundations of a fraught legacy that continued into the twentieth century. The protection of elephants in colonial India emerged less from ecological concern than from the strategic and utilitarian compulsions of the British administration. Elephants were

indispensable to the colonial state for military logistics, timber extraction, and infrastructural projects. They served as transport animals during campaigns, as laborers in forest depots, and as indispensable tools in the clearing of jungles for plantations and settlements. It was this functional necessity that prompted the passing of the Elephants Preservation Act in 1873 and its subsequent extension to the entire subcontinent in 1879. These measures marked the first systematic legislative attempt to conserve a wild animal species in colonial India, but the underlying logic of conservation was deeply utilitarian and selective. The Acts also sought to curtail indigenous practices of elephant capture, which colonial officials condemned as cruel, inefficient, and economically wasteful. John McCosh, a colonial officer, reported that the Singhpo tribe of Assam employed poisoned weapons, supplied by the Abor hill people of the Sampoo valley, to kill elephants for ivory. The same poison, he noted, was also used in tiger hunting (M'cosh, 1837). Similarly, William Wilson Hunter criticized the pitfalls method of elephant capture, denouncing it as inhumane and destructive (Hunter, 1882). Such condemnations reveal how colonial authorities sought to delegitimize local hunting practices, portraying them as barbaric in contrast to the supposedly more "scientific" and "rational" methods of capture introduced by the state through keddahs and other organized systems. This rhetoric justified not only the regulation of wildlife but also the imposition of a state monopoly over valuable forest resources. An important feature of both the 1873 and 1879 Acts was the emphasis placed on the protection of female elephants. This can be explained by the limited economic value of Asian female elephants, which, unlike their African counterparts, rarely bear large tusks. Male elephants were thus more vulnerable to poaching for ivory, while females were preserved as breeding stock to sustain future elephant populations required by the state. In contrast, African elephants, with both males and females possessing tusks of equal length, were relentlessly hunted for ivory well into the twentieth century. The case of Arthur H. Neumann, a British hunter in East Africa who killed sixty-nine elephants around 1900 and profited £4,500 from ivory sales, illustrates the commercial motivations that drove elephant slaughter in Africa (Mandala, 2018). The situation was further exacerbated during the First World War, when elephants were killed to provide meat for British troops. In India, however, the emphasis was on capture rather than slaughter. Estimates by ecologist Raman Sukumar suggest that between 30,000 and 50,000 elephants were killed or captured in the closing decades of the nineteenth century (Sukumar, 1992). The captured elephants were integrated into the colonial economy as beasts of burden, while ivory derived from kills added to the revenues of the state.

Thus, while the Elephants Preservation Acts appeared to extend legal protection to a species, they simultaneously facilitated a massive reorganization of human-animal relations in which elephants were transformed from autonomous beings into instruments of imperial extraction and control. This selective protection of elephants also had indirect consequences for other species. By ensuring a steady supply of elephants for military and economic purposes, the colonial state intensified campaigns against carnivores, particularly tigers, leopards, and wolves. These predators were portrayed as both a threat to human settlements and a danger to the populations of herbivores that served as game for elite hunting. The logic of extermination was further justified on the grounds of "vermin eradication," and official records reveal staggering numbers: between 1875 and 1925, more than 80,000 tigers, 150,000 leopards, and 200,000 wolves were killed. In this sense, the protection of elephants under the guise of preservation was inseparable from the destruction of predators, reinforcing the paradox of colonial conservation. Ultimately, the Elephant Preservation Acts demonstrate how early colonial policies of wildlife protection were entangled with broader strategies of imperial governance. Conservation was framed not as an ecological imperative, but as a means of consolidating control over forest resources, restricting indigenous practices, and ensuring the

steady supply of animals vital to the colonial enterprise. The Acts reflected a model of "conservation without ecology," where preservation was driven by revenue, utility, and imperial symbolism rather than concern for biodiversity. They also set a precedent for later wildlife legislation in India, which continued to privilege elite interests—whether those of planters, administrators, or sportsmen—over the needs of local communities and the integrity of ecological systems.

Non-Governmental Initiatives and the Expansion of Wildlife Preservation

"More and more games will only be able to survive insofar as man himself is both able and willing to set a limit to killing"(Burton, 1952-53).

While the colonial state introduced a series of legislative measures to regulate forests and wildlife during the late-nineteenth century, non-governmental organizations also emerged as influential actors in shaping conservation discourse. These associations, formed largely by European residents, planters, and naturalists, reflected the dual impulses of utilitarianism and recreation that characterized colonial approaches to nature. Their activities were closely aligned with the needs of the empire, even as they projected themselves as scientific and civic initiatives. One of the earliest such organizations was the Nilgiri Game Association, established at Ootacamund in early 1877. Its first meeting, held on 14 June of that year, brought together twenty-six members, including European residents and planters, under the chairmanship of Colonel Wilson. An interim committee was appointed, with figures such as G.A.R. Dawson and P. Hodgson, who drew up a program of recommendations to be submitted to the Madras Government. These members gave the following recommendations to the Madras Government.

1. The establishment of, and the prohibition of, the sale of game during a close season.
2. The prohibition of the slaughter of hinds and cow bison.
3. The registration of native shikarries.
4. Licensing of guns.
5. The enforcement of these provisions is by legislative enactment.

The culmination of these efforts was the Nilgiri Game and Fish Preservation Act of 1879, which represented one of the first region-specific attempts to regulate hunting in India. Yet, in line with colonial priorities, the Act extended protection primarily to herbivores that provided meat or served as quarry for sport, leaving carnivores outside the ambit of protection (Shikari, 1880). A more enduring institution emerged a few years later with the founding of the Bombay Natural History Society (BNHS) on 15 September 1883. Established by seven enthusiasts of natural history, including Edward Hamilton Aitken, Dr. G.A. Maconachie, Colonel Charles Swinhoe, J.C. Anderson, J. Johnston, Dr. Atmaram Pandurang, and Dr. Sakharam Arjun, the Society quickly became a hub for naturalist activity in western India. Its meetings, initially held at the Victoria and Albert Museum in Bombay, fostered the exchange of field observations, the display of specimens, and the encouragement of scientific pursuits. The Society's first honorary secretary, E.H. Aitken, launched its journal in January 1886 in collaboration with R.A. Sterndale. The *Journal of the Bombay Natural History Society* soon became one of the most influential periodicals of its kind in Asia, publishing contributions on birds, reptiles, amphibians, mammals, and insects. Members of the BNHS were themselves active collectors (Sterndale, 1886). Colonel Swinhoe contributed seventy bird skins from Sind, while J.C. Anderson assembled large collections from Shimla. Under the long tenure of H.M. Phipson as secretary (1886–1906), the Society expanded its institutional base, even operating out of part of Phipson's Forbes Street beer shop in Bombay. Yet the paradox of the BNHS lay in the fact that many of its members were simultaneously naturalists and hunters. Swinhoe, despite his

contributions to ornithology, was reputed to have killed between fifty and sixty tigers (Ali, 1978). This dual identity reflected the ambivalent character of colonial conservation, where scientific curiosity often coexisted with the culture of sport hunting.

By the late nineteenth century, bird populations across India had come under serious threat due to hunting for meat and plumage, habitat destruction, and the demands of sport and trade. In response to such concerns, the Wild Birds and Game Protection Act of 1887 was enacted, in part through the lobbying of the BNHS and the Nilgiri Game Association. However, enforcement remained weak, and large-scale hunting continued unchecked. Expressing concern over birds hunting, BNHS' secretary H.M. Phipson wrote a letter to the Bombay Government on 16th April,1891. He sadly wrote that

" considering the wanton destruction of birds for the sake of their plumage, which has of late taken place in many parts of the country, and which appears to be on the increase, the Committee [BNHS] are of opinion that protection should not be restricted to game, but should extend to all indigenous wild birds as well as to harmless wild animals, and that a measure based on such liberal and comprehensive lines would meet with the approval and sympathy of natives as well as European."

He warned that unless strict measures were taken, birds would disappear from large parts of Sind. He cited the example of a seizure of nearly 40,000 bird skins in Rohri district, where hunters, many of them migrants from Madras, captured black partridge in vast numbers for the lucrative plumage trade (Phipson, 1891). The colonial state itself recognized a pragmatic rationale for bird protection: insectivorous birds were crucial to agriculture, as they checked the spread of pests that damaged crops. At a meeting of the Agri-Horticultural Society in 1888, J.R. Rainey delivered a lecture on the "Effectual Protection of Insectivorous Birds in the Interests of Agriculture," warning that their decline led directly to crop failures and the spectre of famine. Reports from Khulna district in Bengal, where paddy crops had been devastated by insect infestations, reinforced this argument. Such utilitarian justifications mirrored developments in the United States, where laws protecting insectivorous birds had been passed as early as 1859-60 (Phipson, 1889). Taken together, these developments reveal the complex but ultimately instrumental nature of late nineteenth-century wildlife preservation in India. Initial regulations had focused on restricting hunting during breeding seasons to maintain meat supplies, though exemptions for British officials and Indian elites revealed their inequitable character. Elephants were protected through special legislation, not for ecological reasons, but because of their indispensability to transport, labour, and military logistics. Later, bird protection was framed in agricultural terms, emphasizing their role in controlling crop-destroying insects. Carnivores, however, remained systematically excluded from protection, both because of their perceived threat to game and livestock and because the colonial state profited from the global trade in their skins. The activities of associations like the Nilgiri Game Association and the BNHS thus highlight both the growth of a preservationist discourse and its limitations. While these organizations promoted new ideas of scientific observation and regulatory control, their initiatives were deeply shaped by the broader imperatives of empire—revenue extraction, agricultural stability, and elite hunting culture. Early non-governmental conservation efforts, therefore, did not challenge the colonial paradigm but reinforced it, embedding wildlife preservation firmly within the utilitarian and recreational priorities of the British Raj.

Conclusion

The period between 1855 and 1897 represents the formative stage in the evolution of both colonial forest policy and the early discourse on wildlife preservation in India. What emerged during these decades was not conservation in its ecological sense, but a set of practices and

regulations designed to consolidate imperial authority, maximize economic extraction, and safeguard elite privileges. Forest Acts restricted indigenous access to forest produce and criminalized long-standing subsistence practices such as shifting cultivation, thereby displacing local communities while simultaneously ensuring a steady supply of timber for the colonial state. Similarly, wildlife legislation—whether in the form of the Elephants Preservation Acts or the Wild Birds and Game Protection Act—was shaped by utilitarian concerns, serving military, agricultural, and recreational needs rather than ecological balance. Non-governmental associations like the Nilgiri Game Association and the Bombay Natural History Society contributed significantly to the institutionalization of preservation discourse. Yet their interventions largely reflected the same contradictions inherent in colonial policy: an emphasis on protecting game species for sport and subsistence, coupled with the systematic extermination of carnivores deemed "vermin." The selective nature of such protection highlights the utilitarian and anthropocentric foundations of early preservationist thought in colonial India. In sum, colonial "preservation" was inseparable from the broader project of empire. Forests and animals were regulated not as elements of a fragile ecological system, but as resources to be classified, controlled, and exploited for imperial advantage. The legacy of this period lies in the contradictory foundations it laid for future conservation efforts, establishing institutions and discourses that invoked the language of preservation, while perpetuating exclusions, displacements, and ecological imbalances. Any critical understanding of modern conservation in India must therefore reckon with these imperial origins, where ecology was subordinated to empire and preservation served as another instrument of colonial control.

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