Khedas in South-Eastern Bengal: Colonialism and Wildlife 1765–1810

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The colonial impact on forests and woodlands in India and the development of an imperial forest policy has been the focus of many excellent and exhaustive studies[1] but the engagement with wildlife in works on Indian environmental history has been somewhat limited.[2] Yet ecologically informed histories around the world have mostly taken into account the animal dimension.[3] In an attempt

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to fill this historiographical lacuna, the current essay focuses on the East India Company's (EIC) engagement with the Indian elephant as a point of entry into colonial environmental practices. The focus of the work is the region of Bengal, particularly its south-eastern tracts comprising the districts of Sylhet, Chittagong and Tipperah. In these regions the British, following Mughal traditions, captured elephants by means of elaborate *kheda* hunts. Through the capturing of elephants in *khedas* (enclosures), the EIC attempted to obtain a herd of the animal for its military. Unlike the Bengal tiger, which was decimated during the colonial era,[4] the elephant 'became a legitimate prey of the gun for only a few decades of the nineteenth century'.[5] The reason for this contrast was that the elephant was cru-

[1] M.D. Gadgil and R. Guha, *This Fissured Land: An Ecological History of India* (New Delhi: Oxford University Press, 1992); R. Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya* (New Delhi: Oxford University Press, 1991; first published 1989); K. Sivaramakrishnan, *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India* (New Delhi: Oxford University Press, 1999); A. Bandopadhyay, 'Forest, land use and water in Colonial South Asia: Issues from agrarian and environmental History', in R. Chakrabarti (ed.), *Situating Environmental History* (New Delhi: Manohar, 2007), pp. 77–101.

[2] Notable exceptions would be M. Rangarajan, *Fencing the Forest: Conservation and Ecological Change in India's Central Provinces 1860–1914* (New Delhi: Oxford University Press, 1996) and *India's Wildlife History: An Introduction* (New Delhi: Permanent Black, 2001), pp. 265–99; R. Chakrabarti, 'Local people and the global tiger: An environmental history of the Sundarbans', *Global Environment* **2** (3) (2009): 72–95; A. Jalais, *Forest of Tigers: People, Politics and Environment in the Sundarbans* (London: Routledge, 2010); N. Nongbri, 'Elephant hunting in late 19th century North-East India: Mechanisms of control, contestation and local reactions', *Economic and Political Weekly* **38** (30) (2003): 3189–99.

[3] D. Worster, *Nature's Economy: The Roots of Ecology* (San Francisco: Sierra Club Books, 1977); K. Thomas, *Man and the Natural World: Changing Attitudes in England 1500–1800* (London: Allen Lane, 1983); W. Beinart, *The Rise of Conservation in South Africa: Settlers, Livestock, and the Environment, 1770–1950* (Oxford: Oxford University Press, 2003); M. Elvin, *The Retreat of the Elephants: An Environmental History of China* (New Haven: Yale University Press, 2004).

[4] M. Rangarajan, 'The Raj and the natural world: The war against dangerous beasts in colonial India', *Studies in History* **14** (2) (1998): 265–99.

[5] J.M. Mackenzie, *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 1997), p. 183.

cial to the military-administrative needs of the EIC, unlike the tiger, which posed a threat to the same.[6] Hence, the colonial impact on Indian wildlife cannot be adequately analysed within a monolithic framework of a purely destructive state, but the different strands within it need to examined and brought to scholarly attention.

While scholars like M. Rangarajan have viewed colonialism essentially as an 'ecological watershed' in terms of state-sponsored reduction in faunal diversity and the monopolisation of forest and wildlife resources, Richard Grove and R.H. Drayton have instead focussed on local networks of information and knowledge transfer between the coloniser and colonised environments in analysing colonialism's ecological impact.[7] Drawing from both approaches, this article argues that although the EIC, following military traditions in the Indian subcontinent, attempted to capture and domesticate the wild elephant and monopolise this important wildlife resource, the British were perennially dependent upon local knowledge and native expertise, as the capture and domestication of the wild elephant was an enduring tradition of South Asia.

The war-elephant in India

Elephants had for long been used in Indian warfare and the majestic beast was instrumental to the rise and fall of fortunes and empires. In ancient India, elephants formed one arm of the four-limbed army (*chaturanga-vahini*) consisting of chariots, elephants, horsemen and infantry.[8] Our sources for the period mention that an ideal war-elephant was in the *mast* condition, that is, in a state

[6] On the contrast between colonial wildlife policies with regard to the tiger and the elephant see V. Ramadas Mandala, 'The Raj and the paradoxes of wildlife conservation: British attitudes and expediencies', *The Historical Journal* **58** (1) (2015): 75–110.

[7] R.H. Grove, 'Origins of Western environmentalism', *Scientific American* **267** (1) (1992): 42–7; R. Drayton, *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (New Haven: Yale University Press, 2000).

[8] Sir J. Sarkar, *Military History of India* (Calcutta: M.C. Sirkar & Sons, 1960), p. 163.

of heightened sexual animation. In the thirteenth and fourteenth centuries elephants were also crucial to the initial military successes of the Turks in India and to the establishment of the Delhi Sultanate.[9] The successors of the Delhi Sultans, the Mughals, also used the elephant extensively in their campaigns all over the Indian subcontinent. The Mughal emperor Babur praised the 'sagacious' nature of the animal and its ability to obey commands.[10] During Akbar's reign more than 100 elephants were reserved as *khasa* (select or private) for the exclusive use of the king.[11] Realising the value of the animal, Emperor Jahangir is even said to have ordered the use of lukewarm water for bathing them in winter,[12] while Emperor Shah Jahan was believed to have purchased two of the most expensive elephants in history.[13] Even in the twilight years of Mughal rule, the founder of the independent *Nawabi* in Bengal, Murshid Quli Khan, continued to send the Mughal emperor elephants from the province in addition to the imperial revenues.[14]

The elephants' role in war generally involved providing the commander of a battle with a secure but lofty seat from which to conduct war and survey the field.[15] With its head sheathed in brass or steel plates, the animal was also used to break through thick wooden gates or forts.[16] Elephants were also excellent swimmers and could move

[9] See D. Latham, 'Simon Digby: War-horse and elephant in the Delhi Sultanate: A study of military supplies (Oxford: Orient Monographs, 1971)', *Bulletin of the School of Oriental and African Studies* **36** (2) (1973): 482–3.

[10] Ẓahīr al-DīnMuḥammad's *The Bāburnāma*, trans. by A.S. Beveridge (London: Luzac & Co., 1922), vol. 2, p. 488.

[11] Abul Fazl Allàmi, *The Ain-i-Akbari*, ed. by D.C. Phillott; trans. by H. Blochmann (New Delhi: Low Price Publications, 1997; first published 1927), vol. 1, p. 137.

[12] Emperor Nuruddin Jahangir, *Tuzuk-i-Jahangiri*, ed. by H. Beveridge; trans. by A. Rogers (London: Royal Asiatic Society, 1909), p. xii.

[13] Seid Gholam Hossein Khan, *Seir Mutaqherin*, trans. By Haji Mustafa (alias Nota Manus) (Calcutta: James White, 1789), editor's notes, vol. IV, p. 212.

[14] Ghulam Husain Salim, *Riyazu-s-Salatin: A History of Bengal*, trans. by Maulavi Abdus Salam (Calcutta: The Asiatic Society, 1902), pp. 259–60.

[15] Sarkar, *Military History of India*, p. 166.

[16] Ibid.

across marshy terrain where cavalry troops were unable to operate. In their campaigns in riparian Bengal, the Mughals made spectacular use of war-boats and elephants.[17] Thomas R. Trautmann argues that it was the military utility of the elephant that explains its 'persistence' in the Indian subcontinent and its 'retreat' in China, where the use of the war-elephant was limited and the animal frequently hunted to protect crops and to obtain ivory.[18] Comparing the eight *gaja-vanas* or elephant forests of the *Arthashastra* (the ancient Indian treatise on polity and economy) with the distribution of elephants in the Mughal period, Trautmann argues that the depletion in numbers of the Indian elephant did not begin in the 'era of the war-elephant' but in the period around 1800.[19] The widespread use of artillery circumscribed the elephant's role in actual fighting, as the animal was easily scared by artillery fire and its panic wreaked havoc among its own ranks. However, the elephant still retained its military utility on account of its immense strength, utilised in dragging guns and carrying equipment and baggage. It has been argued that the EIC, in its battles against the native princes of India, followed a strategy of 'military synthesis' whereby they combined Indian elements of warfare – like the use of elephants – with European ones.[20] Following the traditional methods of elephant-capture prevalent in the subcontinent, the EIC continued to acquire elephants for its military logistical needs. In 1810, the British established a military commissariat in Bengal, one of the chief functions of which was to maintain a stock of elephants. Dacca emerged as the headquarters of the Bengal *kheda* (elephant-capturing operations) with a superintendent in charge of the captured animals. The elephant thus continued to be a war-animal even after the 1800s, though in a much-restricted sense. The animal was still highly prized, not only for military trans-

[17] On the Mughal campaigns in Bengal see M. Nathan, *Baharistan-i-Ghaybi*, trans. by M.I. Borah (Gauhati: Govt. of Assam, 1936), 2 vols.

[18] T.R. Trautmann, *Elephants and Kings: An Environmental History* (New Delhi: Permanent Black, 2015); see also Elvin, *The Retreat of the Elephants*, pp. 9–18.

[19] Trautmann, *Elephants and Kings*, p. 17.

[20] K. Roy, 'Military synthesis in South Asia: Armies, warfare, and Indian society, c. 1740–1849', *The Journal of Military History* **69** (3) (2005): 651–90.

portation but also for provisioning outpost stations that were not connected by roads.[21]

Ecologist and wildlife expert Raman Sukumar, in his wide-ranging study on Asian elephants, has pointed out that compared to their African counterpart, Asian female elephants have only short tusks and many of the males are even tusk-less, which meant that they were less liable to be killed for their ivory.[22] Since elephants were more valuable alive than dead, elephant-hunting for sport was traditionally not practiced in India, although the animal was used in hunting other animals.[23] In 1799, John Corse, in charge of the Company's *kheda* operations at Tipperah, observed that the African ivory was of a much better texture than the Asian, as it was less liable to turn yellow and that the London ivory dealers therefore obtained their supply of the largest tusks from Africa.[24] Still, elephant-hunting as a sport caught on with the British because of the danger and excitement involved, and G.P. Sanderson, the superintendent of the Dacca *kheda*, boasted of having killed about 20 of these animals.[25] But the number hunted in India was comparatively fewer.[26] In Bengal, the sport must have become popular only after 1807, for in that year Thomas Williamson, the celebrated author of *Oriental Field Sports*, was ready to ven-

[21] G.P. Sanderson, *Thirteen Years Among the Wild Beasts of India* (New Delhi: Asian Educational Services, 2000; first published 1882), p. 86.

[22] R. Sukumar, *The Story of Asia's Elephants* (Mumbai: Marg Foundation, 2011).

[23] The elephant was indispensable to the British sportsman going tiger-shooting or hog-hunting in Bengal. On such occasions the animal carried on its back a 'good sporting *howdah*' that was capable of carrying the hunter, his attendant and ammunitions for hunting. See F.B. Simson, *Letters on Sport in Eastern Bengal* (London: R.H. Porter, 1886), p. 91. In some cases of tiger-shooting, however, elephants were mortally injured. Simson mentions an instance where one of his elephants was badly wounded in the trunk by the teeth and claws of the tiger and took six months to recover from her injuries (p. 128).

[24] J. Corse. 'Observations on the different species of Asiatic elephants, and their mode of dentition', *Philosophical Transactions of the Royal Society of London* **89** (1799): 205–36, p. 212.

[25] Sanderson, *Thirteen Years*, p. 194.

[26] Sukumar, *The Story of Asia's Elephants*, p. 232.

ture into a wager that no native of Bengal, nor any European resident there, would undertake 'such a piece of rashness as to go out shooting wild elephants'.[27] The British engagement with the Indian elephant can therefore be divided into distinct phases. In the first phase, before around 1810, when the Dacca *kheda* establishment materialised, the British were mostly engaged in establishing control over the traditional channels of supply of the animal for the needs of its military apparatus. During the second phase, between c. 1810 and the 1870s, the elephant became a genuine prey of British hunters. It was also during this period that rewards were given in the Madras Presidency for the destruction of the animal, which encouraged native hunters to kill an increasing number of the species.[28] However, concerns regarding its extinction soon emerged and in the 1870s the elephant became the first instance of animal conservation in India.[29] For considerations of space, however, this essay – drawing on *shikar* (hunting) sketches, personal memoirs, folk ballads and revenue records –will limit itself to the first phase of the British engagement with the Indian elephant and demonstrate how the EIC was dependent on local knowledge and native agency for capturing and training the animal that was so vital to its military-strategic needs.

Elephant-capturing in Bengal

Located in the south-eastern portion of Bengal, a good part of the districts of Sylhet, Chittagong and Tipperah are hilly and were then densely forested. The forested tracts, which abounded with wild elephants, became areas of human–elephant conflict. The folk ballad of *Hati-Kheda* (elephant-capturing) describes how in the month of November 'when rice grew ripe' and 'the breeze blew in the pastoral fields', the roar of the elephant was heard from the tops of the hills. 'Colour disappeared' from the faces of the hill-men as they appre-

[27] Captain T. Williamson, *Oriental Field Sports* (London: Edward Orme, 1807), vol. 1, p. 141.

[28] Sanderson, *Thirteen Years*, p. 68.

[29] Mackenzie, *Empire of Nature*, p. 183.

hended the approach of these 'formidable destroyers of harvest'. The peasants 'struck their heads with their hands' lamenting the loss of their crops and the fact that their women and children must starve.[30] Elephants were thus captured not only to protect crops, but also to procure a captive herd for military use. The low-revenue-yielding district of Sylhet, in fact, had paid a part of its revenues in elephants since the period of the Nawabs.[31] As the business of catching the animal distracted the peasants from cultivating their land, the Nawab, as compensation, deducted the price of the elephants caught from the revenues of the *zamindars* (local landholders). The main method of elephant-capturing used in these districts was the *kheda*, chiefly to capture a large herd. It was an age-old method of capturing the animal and is mentioned several times in the Mughal sources.[32] Single male elephants expelled from the herd, known in Bengal as the *goonda hathi* ('rogue elephant'), were also captured by luring them with tame she-elephants called *koonkies*.

In the *kheda* method, elephant-catchers after spotting a herd of elephants made a great deal of noise with drums and other instruments to drive the animals into enclosures or *khedas*. Here the elephants were starved until they became more tractable. The enclosures were surrounded by a deep ditch and if the elephants attempted to break out at any point, the guards would set off firecrackers to scare the animal. Once the strength of the wild animals had been sufficiently reduced, tame she-elephants, with drivers hidden underneath, entered the enclosure and the wild elephants were bound and rendered captive.[33] *Kheda* operations in south-eastern Bengal became signifi-

[30] 'Ballad of the *Hati-Kheda*', in D.C. Sen (ed.), *Eastern Bengal Ballads* (Calcutta: University of Calcutta, 1928), vol. 3, Part 1, pp. 107–33.

[31] Lord Lindsay, *Lives of the Lindsays: A Memoir of the Houses of Crawford and Balcarres* (London: John Murray, 1849), vol. 3, p. 163.

[32] Vide Abul Fazl's account of the different methods of capturing the elephant in the *Ain-i-Akbari*, vol. 1, p. 295. On Mughal *kheda* operations in Bengal, see the *Baharistan-i-Ghaybi*, vol. 1, p. 22.

[33] The driver 'covered with a linen' generally hid himself beneath the stomach of the tame elephant 'hiding himself as best as he could careless of his life'. At a signal from him, the tame elephants pressed the wild one so 'that he could neither move

cant to the EIC around the 1770s, when it started looking for a way to substitute carriage bullocks with elephants in its military.[34]

Although a British officer remained in charge of the EIC's elephant-catching operations (as John Corse was at Tipperah), the entire operation was overwhelmingly conducted with the knowledge and expertise of the natives. Robert Lindsay, who amassed a fortune capturing and selling elephants on his private account, writes in his memoirs that at the time of his Residency in Sylhet, about five hundred animals were captured every year.[35] In the early days of October, when the rains had subsided, tracksmen known as *panjallies* were sent out to the hills to find elephant herds and to ascertain their numbers and quality.[36] Lindsay admits that the business required considerable experience and the *panjallies* were men expert at their work. The quality of an elephant herd was ascertained by the trackers by examining the animals' footprints in the mud, the trodden down vegetation and the remains of bamboo, the favourite fodder of the animal. Once the trackers had obtained satisfaction that the numbers and quality of the elephants caught would justify the expenses of a *kheda*, only two of the trackers would return from the spot to give intelligence. After this, 150–200 men were despatched to the forest to join the *panjallies* while another body of men busied themselves in constructing the *kheda* enclosure. Thus the bulk of the manpower

this way nor that'. At this stage the intrepid driver came out of his 'retreat under the stomach of the tame elephant' and 'bound the two feet of the wild one'. See 'Ballad of the *Hati-Kheda*', in D.C. Sen (ed.), *Eastern Bengal Ballads*, vol. 3, Part 1, pp. 132–133.

[34] The move to substitute carriage bullocks with elephants was influenced by a number of considerations. Carriage bullocks were often requisitioned from peasants, the Company not having a fixed establishment of these animals. Not only was this practice injurious to the peasants but the bullocks thus procured, if unaccustomed to carrying loads, as was frequently the case, were known to throw off their baggage. In crossing marshy terrains, they also wet their loads by which the health of the troops was compromised. The elephant on other hand could carry greater weights and swim across marshes with ease without getting the baggage soggy. National Archives of India (NAI), Home, Public Proceedings 1773, 15 April to 29 June 1773, Fort William 17 June 1773.

[35] Lindsay, *Lives of the Lindsays*, p. 190.

[36] Ibid., pp. 190–1.

(about 370 people in all) required for completing a *kheda* operation came from the natives, although the charge of conducting the *kheda* was borne by the Company. In 1771 however, the Company found *kheda* operations in Sylhet to be too expensive and 'forbid all further charge on their account for catching elephants'.[37] However, in view of the difficulties encountered by the peasants and zamindars of the district from the crop-raiding animals as well as considering the EIC's need to obtain a steady supply of elephants for the army, the decision was revoked. In 1777 it was decided that the charges incurred in conducting the *kheda* operations in Sylhet were 'to be defrayed in the proportions of one half by the Company and one half by the Nizamat'[38] and whatever elephants were caught in the *khedas* were also to be equally divided between the Nizamat (the office of the *Nazim* or Viceroy, here referring to the Nawab of Murshidabad) and the EIC.[39] Towards the end of our period, with the emergence of Dacca as the headquarters of the *kheda* operations in Bengal, the business of capturing the animal and obtaining a steady supply of elephants for the military came to be more centralised and systematised. The entire establishment (see Table 1) was in charge of a European officer under whose superintendence *kheda* operations were organised annually around December. A permanent stud of *koonkies* was also maintained at Dacca and the newly captured elephants underwent training there before being sent out to the military stations.[40]

[37] W.K. Firminger (ed.), *Sylhet District Records 1770–1785* (Shillong: Assam Secretariat Printing Office, 1913), vol. 1, p. 2.

[38] West Bengal State Archives (WBSA), Proceedings of the Provincial Council of Revenue at Dacca, 2 October to 22 December 1777 (sect. series), vol. 18, 2 December 1777.

[39] WBSA, Proceedings of the Provincial Council of Revenue at Dacca, 2 October to 22 December 1777 (sect. series), vol. 18, 2 December 1777.

[40] How the elephants were transported from the remote stations in Tipperah, Chittagong and Sylhet to the station at Dacca remains obscure. The animals obviously undertook a long march, but in Chittagong a peculiar variety of boat was constructed that could transport elephants across water one at a time. Simson claims to have used these *balam* boats, as they were called locally, for transporting his elephants to Dakhin Shahbazpur, an island in the river Meghna. The *balam* boats were made in Arakan, were highly flexible and capable of carrying many

Table 1. Composition, role and pay of a hunting party (kheda)

No.	*Composition*	*Rate of pay per mensem* Rs.	*Role*
1	*Jemadar* responsible to a British Officer	25	To collect establishment and conduct operations
1	Interpreter	10	Interpreter to the hill-men
1	Writer	9	To furnish reports, accounts
1	Head-Tracker	9	To go in advance and ascertain the position and number of the herds, and to lead the party in surrounding a herd
2	Mate-Trackers	7 ½	
15	Trackers	7	
20	Head-Coolies	9	To surround and guard the herd, construct enclosure (kheda) and drive the elephants in
20	Mate-Coolies	7 ½	
280	Coolies	7	
1	*Havildar*	9	To keep a check on the circle of coolies
1	*Naik*	7 ½	
14	Sepoys	7	
1	Head-nooser	9	To bind the animals inside the enclosure
4	Noosers	7	
1	Head-*pulwan*	9	Men furnished with guns who take post anywhere the elephants seem determined to break the cordon of coolies
2	*Pulwans*	7	

Source: G.P. Sanderson, *Thirteen Years among the Wild Beasts of India* (New Delhi: Asian Educational Services, 2000; first published 1882), p. 71.

In the entire *kheda* operation the enterprising native *jemadars* (who collected and co-ordinated the other functionaries) played a crucial role. Sometimes these *jemadars* also organised hunts on their private account, as the ballad of the *Hati-Kheda* (composed by the Chittagong peasantry) narrates. The protagonist of this folk ballad is Jemadar Golbadan, who captured about 100 elephants in the hill tracts of the district selling them all together for over a *lakh* of rupees.[41] In another later ballad composed by one Makbul Ahmed of the village of Noapara (Chittagong), Golbadan's son Ochhi Mian is the hero. Being sponsored by the zamindar of Chakbazar, Ochhi Mian conducted a *kheda* and caught about 45 elephants, the entire lot being purchased by Maharaja Surya Kanta Acharyya of Mymensingh.[42] Apart from the three districts of Chittagong, Sylhet and Tipperah, wild elephants also abounded in the Garo hills and the native huntsmen from Purnea, Rangpur and Mymensingh used to capture them by a method known as *mela-shikari*, or catching of wild elephants by lassoing.[43] Because of the capture of elephants by native hunters, there existed a country-wide private market in elephants and the EIC sometimes obtained their supply that way, instead of conducting *khedas* itself.

Elephant management

With regard to the management of the newly captured animals in the *kheda*, the EIC was overwhelmingly dependent on indigenous expertise. Once the elephants had been captured by means of a *kheda*, they needed to be attended to, especially if they had been wounded

thousand *maunds* of cargo. They were rowed by twelve to twenty rowers. Additionally, to make them capable of withstanding the weight of an elephant, 'the bottom of the boat was filled for three feet with beaten soil and the trunks of plantain or banana trees'. See Simson, *Letters on Sport*, pp. 118–19.

[41] Sen, *Eastern Bengal Ballads*, p. 133.

[42] Ibid., p. 113.

[43] W.W. Hunter, *A Statistical Account of Assam* (London: Trubner & Co., 1879), vol. 2, p. 145.

inside the enclosure. Each elephant required two attendants, the *mahout* (the driver of an elephant) and his mate. Male elephants required more attention than females, as they were known to go into the *mast* condition of heightened sexual ardour when they became practically unmanageable and had to be secured and chained up by the elephant-keepers till their fury had somewhat abated. In his *Oriental Field Sports*, Williamson observes that the native *mahouts* were aware of several ways of tending to elephants. For instance, when elephants were much troubled by worms, the *mahouts* were known to give them *kala-namak* (Bengali: *bit lobon*, black salt) dissolved in water, as a purgative for the expulsion of the worms.[44] As the feet of the elephant were accustomed to a 'moist verdure' and affected by the 'stony, sunburnt soils', the *mahouts* were known to apply to their feet 'resinous and balsamic drugs, being boiled with various herbs, supposed to possess an astringent power'.[45] Sanderson, the *Kheda* Superintendent at Dacca, believed that the *mahouts* from their long years of observation of the animal were also capable of correctly assessing their age.[46] In fact, trained elephants were more attached to the *mahouts* than to their masters and were known to recognise them even after long periods of separation.

A significant aspect of elephant management was procuring the vast quantities of fodder needed for the animal. At the Dacca *filkhana* (elephant stables) the task of supplying fodder for 200–300 animals kept on account of the government led to burgeoning of a trade in fodder involving native boat-men and grass-cutters who supplied the government establishment after having paid a royalty to the zamindar from whose *bils* (stagnant water bodies with rank vegetation) the grass was procured.[47] When elephants were worked hard and needed to be fattened up, the *mahouts* additionally fed them with *dhul*-grass that grew abundantly in the *bils* of eastern Bengal.[48]

[44] Williamson, *Oriental Field Sports*, p. 139.
[45] Ibid., p. 156.
[46] Sanderson, *Thirteen Years*, p. 60.
[47] Simson, *Letters on Sport*, p. 87–88.
[48] Williamson, *Oriental Field Sports*, p.162. Also see Simson, *Letters on Sport*, p. 21.

During the rainy season the elephants were sometimes turned loose on the *bils*, where they revelled in the water and the luxuriant green vegetation.[49] Given the ready supply of fodder, the cost of maintaining the animal was considerably less during the rainy season than at other times of the year.[50] Generally during dry weather, elephants were fed on unhusked rice, plantain trees, bamboo leaves and the branches of figs and other trees.[51]

Table 2. Names of some elephants caught in *kheda* operations in Sylhet

Name	*Size*	*Gender*
Santasundar	Large	Male
Janbaksh	Large	Male
Jatrarani	Middling	Female
Parbati	Small	Female
Lalpyari	Large	Female
Jatrapyari	Large	Female

Source: West Bengal State Archives, Proceedings of the Provincial Council of Revenue at Dacca, 4 March to 27 June 1776, 10 June 1776.

[49] Simson, *Letters on Sport*, p. 87.

[50] Ibid., p. 88. Simson points out that he spent about Rs. 30 per month in the upkeep of an elephant, which dropped Rs. 10 in the month of June, that is during the monsoons when the uncultivated plains of eastern Bengal were covered with grasses three to sixteen feet in height and stems as thick as bamboos (p. 134).

[51] Ibid., p. 88.

A peculiar tradition prevailing in the capture and domestication of the elephant in India was the practice of naming these creatures depending upon their size, gender and character (see Table 2). For instance, a large male elephant might be named *Santasundar*, colloquially 'the calm and docile one'! Sivasundaram notes that the British readily adapted this peculiar eastern tradition of anthropomorphising the animal by naming them in the Company's military.[52] At the government stud in Dacca the largest and most magnificent male tusker, of about ten feet in height, was named Bruce.[53] Most trained elephants were known to respond to and recognise the names that were given to them once they had been domesticated. In the Indian tradition however, the elephant was not only named, but also ascribed human emotions. Rangarajan cites a fine example of Ibrahim Adil Shah II, the ruler of Bijapur, who penned verses on the pangs of separation between the tusker Atash Khan and his mate the cow-elephant Chanchal, ceded to the Mughals as tribute.[54] Curiously enough, the British also adopted this indigenous tradition of the anthropomorphic portrayal of the elephant. Although the elephant essentially functioned as a beast of burden in the EIC's military, efforts were made by officials to distinguish the animal from other beasts of burden like mules, asses or bullocks. The animal was given greater agency by its ability to comprehend and control situations and manage emergencies. Take for instance Captain Walter Campbell's account of the dexterity of the elephant in extricating guns stuck in mud or morass:

> when a gun comes to grief, the elephant marches up with the important air of an experienced engineer, and deliberately inspects the state of affairs. Twisting his trunk round the spoke of one wheel, he gives it a lift, as if to ascertain the depth and tenacity of the mud, and then quietly walks round and does the same by the other wheel, dropping it again with a knowing twinkle of the eye, as if he said to himself 'All right, I can start her, I think.'[55]

[52] S. Sivasundaram, 'Trading knowledge: The East India Company's elephants in India and Britain', *The Historical Journal* **48** (1) (2005): 27–63.

[53] Simson, *Letters on Sport*, p. 84.

[54] Rangarajan, *India's Wildlife History*, p. 15.

[55] Captain Walter Campbell quoted in C.E.D.B., 'The intelligence of the elephant', *Journal of the Royal Society of Arts* **57** (2943) (1909): 436–40, p. 438.

The British, like their Mughal predecessors, were convinced of the military utility of the elephant and its sagacious character. In his *Oriental Field Sports*, Williamson observed that the most arduous British military operations had been 'greatly indebted for their success to the sagacity, patience, and exertion of elephants' and that these animals besides carrying baggage often displayed judgement 'bordering very closely on reason'.[56] Conforming to Indian anthropomorphic traditions, Williamson observed that the elephant should be treated with 'deference' since the animal exhibited 'a sense so nearly allied to our own distinguishing characteristic'.[57] This anthropomorphic portrayal of the animal can be found in other tracts of the colonial era,[58] but it is perhaps best exemplified by the story of one Mr Pidcock, former owner of the Exeter Change Menagerie, London. This singular gentleman was very fond of treating himself and his elephant with a glass of spirits every evening, always giving his companion the first glass![59]

Trading in elephants

As mentioned above, there existed a country-wide market in elephants in India in the eighteenth century of which the native aristocracy formed an important part. As the cost of maintaining the animal was considerable, the buying and selling of elephants was generally a governmental or aristocratic preoccupation. Although the EIC conducted *khedas* to obtain their supply of elephants, when *khedas* proved expensive the Company too obtained its supply of the animal from the private market and its officials not only featured as buyers but also as sellers. The two earliest British speculators in the trade in elephants were both Resident-officials of Sylhet: William Makepeace Thackeray and Robert Lindsay. While Thackeray tried to profit from selling el-

[56] Williamson, *Oriental Field Sports*, p. 160.

[57] Ibid., p. 161.

[58] Anonymous, *The Elephant Principally Viewed in Relation to Man* (London: Charles Knight & Co., 1844).

[59] Ibid., p. 23.

ephants to the Company,[60] Lindsay on the other hand targeted the native princes and aristocracy, who were still powerful at the time. Lindsay mentions these native aristocratic buyers to have been over-particular in buying the perfect mount for military or ceremonial purposes. On the other hand, the EIC and other European buyers were known to be less fastidious in their choice of elephants and were perfectly satisfied with a strong and healthy one. In his memoirs, Lindsay writes that his business of selling the animal all over India functioned with the assistance of his native peons who were put in charge of 150–200 elephants annually, divided into four flocks or caravans.[61] The Resident also had a faithful servant named Manu who was entrusted with about fifty to sixty elephants and would return after almost a year's absence with a banker's cheque for 3,000–4,000 pounds.[62]

However, trading in elephants required knowledge of the different species and varieties of the animal as well some understanding of the likes and dislikes of the natives. From his experiences and interactions in Tipperah, John Corse found that male and female elephants were divided by the natives of Bengal into two castes – the *koomareah* and the *merghee*.[63] The former, he learnt, was a superior variety of the animal compared to the latter on account of its strength and its ability to carry heavier loads. Additionally, there were mixed breeds from the *koomareah* and the *merghee* castes that were held in greater or lesser estimation depending upon their closeness to the true *koomareah* or *merghee* species respectively. Corse points out that the elephants with large tusks were known by the natives of Bengal as *dauntelah* (toothy), while the tusk-less variety was known as *muckna* (probably from Bengali mookh: the mouth or face). Corse remarks that the *muckna* variety was more manageable than the tuskers, but the natives, preferring a little ostentation, were fond of the *dauntelah*. A perfect tusker possessed the *pullung dant*, which was curved at the

[60] On Thackeray's dealings with elephants in Sylhet, see F.B. Bradley-Birt, *'Sylhet' Thackeray* (London: Smith, Elder & Co., 1911).

[61] Lindsay, *Lives of the Lindsays*, p. 196.

[62] Ibid., p. 197.

[63] Corse, 'Observations on the different species of Asiatic elephants', p. 205.

extremities so that it was supposed a man might lie on them as on a bed or *pullung*. Europeans on the other hand preferred a docile *muckna* to an unmanageable *dauntelah*, the absence of the tusks not being a factor with them. Corse points out that when a tusker with *pullung* type of tusks lost one by accident he was likened to the Hindu deity *Ganesa* and would fetch a very fancy price in the market. Corse found that the *Ganesa* variety was bought largely by native Hindu princes who worshipped the animal as a divinity.[64]

Depending on whether or not an elephant had all the marks of perfection, its market price varied. For the purposes of supplying its army the EIC bought elephants with an average height of seven feet for five hundred *sicca rupees*,[65] while elephants which had all the marks of perfection in the eyes of the natives and were about nine or ten feet in height were considered very valuable and sold for 8,000–10,000 rupees.[66] The smallest elephants on the other hand sold for as little as 100 rupees each.[67] Williamson, writing in 1807, points out that elephant prices in the market tended to fluctuate as the markets were easily 'over-stocked'. Possibly by the 1800s the decline of the native aristocracy due to the military victories of the EIC against them adversely affected the elephant market. The Nawab at Murshidabad (the erstwhile capital of Bengal), however, continued to maintain a magnificent stud of elephants till the late nineteenth century for the purpose of hunting and ceremony,[68] as did some of the zamindars of eastern Bengal. In his hunting memoirs, Frank Simson mentions the zamindar of Shushang, lying to the north of

[64] Ibid, p. 210.

[65] The rupee was a silver coin, 'the general denomination of the silver currency of India, and the standard measure of value'. In the declining days of the Mughal empire, 'every petty chief coined his own rupee, varying in weight and value, though usually bearing the name and titles of the reigning emperor'. This practice continued until 1773, when these local currencies were suppressed in the territories subject to the Company, and a new rupee was struck, entitled the sicca rupee. H.H. Wilson, *A Glossary of Judicial and Revenue Terms* (London: W.H. Allen & Co., 1855), p. 447.

[66] Williamson, *Oriental Field Sports*, pp. 114, 116.

[67] Simson, *Letters on Sport*, p. 83.

[68] Ibid., p. 56.

Mymensingh, to have possessed considerable numbers of the animal.[69] Some private European gentlemen, as well as organisations like the Calcutta Tent Club, maintained a corps of elephants for hunting.[70] In 1882, Sanderson mentioned the great annual fair at Sonepur on the Ganges, which was the chief market for elephants in India.[71] To this day elephants are bought and sold at the Sonepur cattle fair, though under much reduced circumstances.

British experiments and improvements

Although Britons acquired the bulk of their knowledge of capturing, training and trading of elephants from indigenous traditions and practices, not all native customs with regard to the animal were accepted at face-value. Knowledge on the animal gathered from local agencies had to be experimentally verified before being accepted as scientifically true. John Corse, during his ten years of residence at Tipperah, showed great interest in the natural history of the elephant and even conducted experiments with captive breeding. He also experimented with the elephant's capacity to remember and recall, and disputed, from practical experience, the native belief that a captured elephant, once escaped, could not be recaptured in a *kheda* as the animal could recall its previous experience. In 1799, two of his articles, 'Observations on the manners, habits, and natural history of the elephant' and 'Observations on the different species of Asiatic elephants, and their mode of dentition', were published in the *Philosophical Transactions of the Royal Society of London*.[72] These sci-

[69] Ibid., p. 22.

[70] Simson mentions the Judge of Rajshahi as having possessed his own elephants. These private studs were small, however, with not more than four or five domesticated elephants. Simson himself possessed about five of these animals, although maintaining even this small stud, he says, was expensive (Simson, *Letters on Sport*, pp. 65, 82).

[71] Sanderson, *Thirteen Years*, p. 91.

[72] J. Corse, 'Observations on the manners, habits, and natural history of the elephant', *Philosophical Transactions of the Royal Society of London* **89** (1799): 31–55; and 'Observations on the different species of Asiatic elephants'.

entific tracts written by a British official initiated knowledge transfer between the coloniser and the colonised environments – a process outlined by Grove and Drayton. However, not all experiments by colonial officials were based on scientific methods and principles; some were the outcome of spontaneous curiosity. One Lieutenant Shipp, for instance, probably impressed by the native stories of the proverbial memory of the animal went so far as to give it a large quantity of Cayenne pepper between some slices of bread, to try its 'memory of injuries'. The Lieutenant's experiment turned out to be a success when on his next visit six weeks later the offended animal drenched him in dirty water from head to foot![73]

Some improvements were also made by British officials with regard to the process of capturing the animal. In the early years of the EIC's administration in Bengal, elephant mortality during *kheda* hunts was sometimes very high, with almost half of the captured animals dying (see Table 3). The first resident to Sylhet, William Makepeace Thackeray, who attempted to profit from his sale of elephants to the Company, in fact got himself involved in a long-drawn dispute with the EIC. Of 66 elephants caught at Sylhet and sold to the Company, 50 died on the march from Patna to Belgaum and the EIC refused to pay Thackeray for them.[74] It was found upon examination that the custom of starving the animals to obedience during a *kheda* was an unsuitable and injurious practice. Williamson felt that the 'system of starvation was totally repugnant to the noble disposition of the animal' and that 'although his corporeal powers might be thus overcome, yet his anger was considerably aggravated … which rendered approach extremely difficult, and absolutely debarred all medical or chirurgical [surgical] assistance'.[75] A large portion of the injured elephants died from wounds and the rest were often so mutilated as to become unsaleable in the market. To check the elephant mortality as well as to garner better profits from a *kheda*, the method of starving the animal was abandoned and instead it was

[73] Anon., *The Elephant Principally Viewed in Relation to Man*, p. 133.
[74] Bradley-Birt, *'Sylhet' Thackeray*, pp. 177–215.
[75] Williamson, *Oriental Field Sports*, p. 111.

Table 3. Number of elephants in Sylhet Province for 1780 (B.S. 1187)

Total number of elephants captured	221
Number of elephants that died	106
Number of elephants remaining	115
Elephant mortality	47.9%

Source: W.K. Firminger (ed.), *Sylhet District Records 1770–1785* (Shillong: Assam Secretariat Printing Office, 1913), vol. 1, p. 38.

supplied with its favourite foods and comforted to make it gradually accustomed to the presence of humans. At the same time, certain methods of trapping the animal by the natives were seen as 'wasteful'. Sanderson for instance termed the pit method of capturing the animal as 'a most barbarous method of catching wild elephants'.[76] This method was generally resorted to by peasants lacking the capital and labour to conduct a *kheda*. To protect their crops from damage by elephants, the peasants dug large pits in the paths frequented by elephants and covered them with grass. Elephants passing through the area then fell into the trap, from which they were later extricated by throwing in bundles of grass to an elevation sufficient for the animal to climb out.[77] However, elephants trapped in this way were often dangerously injured by their fall and sold for a much lesser value at the market. For the treatment of sick and injured elephants, an elephant-hospital was also established in Dacca.[78] Although Britons accepted and adopted traditional knowledge with regard to the care

[76] Sanderson, *Thirteen Years*, p. 75.
[77] Williamson, *Oriental Field Sports*, p. 152.
[78] Ibid., p. 125.

of elephants, by the turn of the century they began to increasingly rely upon the European science of veterinary medicine for the treatment of a costly and delicate animal. In 1841, William Gilchrist, surgeon to the EIC army at Hunsur in Mysore, published a wide-ranging survey of elephant diseases with the aim of 'increasing the usefulness of elephants to the army'.[79]

Conclusion

Despite the value attached to the elephant, towards the end of our period from c.1810-c.1870 the hunting of the animal must have increased exponentially, for in the aftermath of the great rebellion of 1857–8 fears were expressed regarding the animals' extinction.[80] To halt the fall in numbers of the animal that was indispensable to the military-strategic needs of the Raj, elephants became the first animal to be officially conserved, with the Elephant Preservation Act of 1879. Apart from stopping the indiscriminate hunting of the animal, this Act also aimed at the monopolisation of an important wildlife resource. Henceforth licences to catch elephants had to be obtained from government by hunters in the south-eastern hill tracts of Bengal.[81] In 1895, the British government was even engaged in a long-drawn-out legal battle with the zamindars of Mechpara, in north-eastern Bengal, over the right to capture elephants found on their estates in the Garo hills and the Goalpara district.[82]

While the proponents of the watershed approach believe the nineteenth-century conservation attempts to have been 'dictated more by the commercial and strategic utility of different species than by broader social or environmental considerations',[83] scholars like

[79] Sukumar, *The Story of Asia's Elephants*, p. 230.
[80] Rangarajan, *India's Wildlife History*, p. 46.
[81] Simson, *Letters on Sport*, p. 83.
[82] NAI, Department of Revenue and Agriculture, August 1895, Proceedings Nos. 23–7.
[83] R. Guha and M. Gadgil, 'State forestry and social conflict in British India', *Past & Present* **123** (1989): 141–77.

Richard Grove consider the colonial conservation policies to have been remarkably innovative in nature and trace in them the origins of western environmentalism. This article has attempted to draw from both approaches by arguing that the colonial engagement with the Indian environment was influenced by imperialistic needs and motivations, but also shaped by pre-colonial traditions and practices, and was dependent on local knowledge of the environment. Although the attempts at the conservation of the elephant were influenced by the motive of monopolising an important wildlife resource essential to the military-strategic needs of the British, despite the monopoly the elephant remained essentially the 'native's animal' as its capture, training and domestication were entirely in native hands, as well as the trade in the animal where the native standard of merit regulated the market.[84]

While the Forest Act of 1878[85] and the Elephant Preservation Act of 1879 attempted to appropriate Indian fauna for exclusive British use, as this article has shown, British negotiations with Indian wildlife were critically dependent on local knowledge and pre-colonial customary practices. Britons not only adapted the Indian techniques of capture and management of the elephant, but also the anthropomorphic traditions with regard to the animal. Hunting and elephant-capturing in Bengal further provided the British with an opportunity to build 'social bridges with Indians particularly the Indian aristocracy'[86] who were the primary connoisseurs of the elephant. A contemporary painting depicts the Marquis Wellesley watching an elephant-fight with the Awadh Nawab.[87] In Bengal, too, hunting was often a joint venture between the European sportsman and the native zamindars who not only supplied him on occasion with elephants from their studs, but also provided vital information on the nature of the terrain and the game and sport available in the

[84] Sanderson, *Thirteen Years*, p. 83.

[85] Rangarajan, *Fencing the Forest*, pp. 158–9.

[86] Mackenzie, *Empire of Nature*, p. 169.

[87] 'M. Wellesley and his suite, at the nabob of Oude's breakfast table, viewing an elephant fight', from T. Williamson, *European in India*, reproduced in Sivasundaram, 'Trading knowledge', p. 28.

neighbourhood.[88] Under these circumstances, the colonising project and the colonial interaction with the Indian environment become a far more complex and nuanced process than is generally supposed.

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[88] Simson, *Letters on Sport*, pp. 85–105.