

## Lions, Cheetahs and Others in the Mughal Landscape

By

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### Abstract

In the age old tradition of the royal hunt, the Great Mughal emperors hunted mega fauna avidly. Their sport was a central activity of court life even when their capital was on the move, along with them. It was during the 16<sup>th</sup> and 17<sup>th</sup> centuries that copious records of the period became available, which enable us to take a close look at the landscape and the hunts. Lions were royal game and the centre of attraction. Whereas, tigers being animals inhabiting primarily thick jungles, received peripheral attention. The cheetahs on the other hand were required as an instrument of hunting blackbuck. They were studied in detail as were the elephants which too were required for the purposes of empire –both for court ceremony and for warfare. The records indicate that the landscape remained conducive to these mega fauna when the Great Mughals ruled. Lions survived them possibly somewhat reduced in numbers. The Cheetahs came in for a severe decimation, but the tigers and the elephants were the least scathed. For all of them the 19<sup>th</sup> century and later, proved to be the most calamitous.

**Key words:** Akbar, Jahangir, Shah Jahan, Aurangzeb, lions, tigers, cheetahs, elephants.

## **Background**

Animals are present in human footprints of history from the earliest time, to our own. In India, 5000 year old Mohanjodaro seals are adorned by tigers, elephants, gharials (long snouted crocodile, *Gavialis gangeticus*), greater one horned rhinoceros (*Rhinoceros unicornis*), and the famous bull among others. The Mauryan Emperor, Ashoka, etched his edicts on pillars, one of which has adorsed lions, India's national emblem. Strabo's first century description of a royal procession in India records among others, *pardalis* (probably cheetahs) and *leontes* (lions) walking in it. The remarkable gold coins of Chandra Gupta II and Kumar Gupta, the Gupta kings of the 4<sup>th</sup> and 5<sup>th</sup> centuries have hunts of lions, tigers and rhinos. Lions, elephants and even tigers are writ large in Indian sculpture throughout the county. Someshwara III, the Chalukya king of Kalyani of the 12<sup>th</sup> century, lists 35 different methods of hunting deer/ antelope and he goes on to describe 31 of them including coursing blackbuck with cheetahs. Firoz Shah Tuglaq, who ruled at Delhi in the 14<sup>th</sup> century, had a huge hunting establishment including lions, cheetahs, caracals and falcons.

Thus the Mughals were in a long line of ancient tradition of hunting and recording interactions with wild and domestic animals. However, there were several unique features of their empire which makes their rule a wealth of information hitherto unknown in India. To understand this we must for a moment, take an overview of their rule and their seats of government.

The founder of the dynasty in India was Babur (r. in Hindustan 1526-30). He had illustrious ancestors in Timur and Genghiz Khan apart from his unlimited ambition. He entered India from Afghanistan with a small band of followers who routed Ibrahim Lodi's army at Panipat with

gunpowder and thus founded the Mughal Empire, in 1526. He took Delhi but barely lived for four years thereafter to be succeeded by Humayun (r.1530-43 and 1555-56). While Babur lived his life on horseback, Humayun had a chequered reign with a period of exile in Persia in between. Babur left a remarkable document in his autobiography, which gives us a ringside view of his world, including the fauna and flora he encountered in India. Whereas in the case of Humayun, the best records of his times are those prepared at the behest of his illustrious successor, which give us but little information on the wild beasts and birds that he encountered.

Emperor Akbar (r.1556-1605) was the first truly great Mughal and his rule has been meticulously recorded by Abul Fazl and others. It was during his reign that paper became available plentifully with its production at Sialkot and Lahore, to be followed later at Daulatabad. While Humayun brought painters on his return from exile in Persia, it was during Akbar's reign that paintings become an important source of information for us. He was probably dislexic<sup>1</sup> which made him more interested in seeing pictures in books he commissioned, rather than being able to read them. The records of his reign give us good insight of the organization of the empire and the animal world in it.

Emperor Jahangir (r.1605-27) was a very keen observer of the natural world around him and his autobiography often reads like a work on natural history. The reigns of Shah Jahan (r. 1628-58) and Aurangzeb (r. 1658-1707) the last of the great Mughals, have also been chronicled in detail. After the death of Aurangzeb, the empire soon declined, giving rise to regional courts of governors of the weakened central authority. The sources of the 18<sup>th</sup> century are few, which give us little material for us to scrutinize. Barely 50 years elapsed between the death of Aurangzeb

and the battle of Plassey, which established the East India Company as a temporal power. Another hundred years were to lapse before the last Mughal king was shifted out of Delhi.

The present paper is an effort to ascertain the fate of some large mammals after their encounter with the Mughal Empire between the first quarter of the 16<sup>th</sup> century and the beginning of the 18<sup>th</sup>, with a brief mention of what happened later.

### Landscapes

The empire of the Mughals at its height encompassed the landmass from Herat in Western Afghanistan in the west to Bengal and beyond in the east, and from Kashmir in the north to the Deccan in south India. According to one estimate, the human population of the Mughal empire (excluding Afghanistan), at the time was 116 million which increased to 285 million by 1901 in the same region. An other authority estimates the population c1605 to have been between 150 to 170 million which increased to 250 million around 1850, that is a rise of about 100 million at the most, in 250 years<sup>2</sup>. The population density has been estimated to be 35 per sq. km. by 1650 for the Indian subcontinent.<sup>3</sup> At the heart of the Mughal empire, the *suba*, province, of Agra had only 27.5 per cent of the land under cultivation in c1608 and most other *subas* in the plains of Hindustan had even less agriculture. There were, therefore, vast areas available as pastures for cattle with abundant supply of firewood in most parts of the realm having higher rainfall in most areas than at present, and possibly there was more forest land available than was thought once to be the case.<sup>4</sup>

Francois Bernier, a French physician traveled in the Mughal empire between 1656 and 1668, that is during the closing years of Shah Jahan's reign and the inaugural years of Aurangzeb's stewardship. He has left a graphic description of the landscape between Agra, Delhi and Lahore, the three great Mughal capitals. It deserves to be quoted:

“In the neighbourhood of Agra and Delhi along the course of the Gemna (Jumna) reaching to the mountains (Himalayas) and even on both sides of the road reaching to Lahor, there is a large quantity of uncultivated land covered either with copse wood or with grasses six feet high”.<sup>5</sup>

Over the years the imperial paraphernalia grew to very large proportions along with the fabulous wealth of the Mughals. Though the three great capital cities were established with several smaller urban centres, the emperors remained peripatetic throughout the period we are concerned with. They were on the move with their entourage not only among the three capitals, but also they moved elsewhere such as Kashmir, Ajmer, Burhanpur, the Deccan and so on. Jahangir ruled for 27 years during which time he traveled between Agra, Lahore, Kabul, Delhi and back to Agra spread over a period of one year between March 1607 and March 1608. His journey from Agra to Ajmer to Mandu and Burhanpur took place between Oct. 1616 and March 1617. He journeyed to Gujarat once, to Kashmir thrice and to Kabul one more time with similar travel schedules.<sup>6</sup>

At this stage it is necessary to take note of the size of the Mughal caravans at the zenith of empire. Jahangir had spent nearly three years at Ajmer when he decided to break camp in 1616. Sir Thomas Roe, the Ambassador of King James I of England was in tow. He records that

because of the reluctance of the people to move, Jahangir had to burn the *lascars*, encampments, to compel them to do so. Roe and the Persian Ambassador Muhammad Riza Beg, who was also there, had no option but to get going. He estimated that the Mughal capital on the move took twelve hours to pass one spot and when the tents were pitched the *circuitt* (circumference) was less than twenty English miles.<sup>7</sup> Jahangir himself estimated that it would take 100,000 Banjara cattle to feed a large Mughal army on its march from Multan to Kandahar since there was little vegetation on the way.<sup>8</sup>

It is evident that the sport of the Mughals would be confined largely to the vicinity of their travel paths. Shah Jahan and Aurangzeb undertook even more journeys than Jahangir and considering the size of their caravans, they too remained near their travel paths for their sport. Thus large mammal species became unwittingly or otherwise, the object of their *shikar* if they were found in grasslands and jungles near their highways and encampments. Irfan Habib's incomparable atlas of Mughal India lists 16 imperial hunting grounds including such celebrated ones as Rupbas and Bari near Agra, Bhatinda and Sunam in the Punjab and Jodhpur and Merta in Rajasthan.<sup>9</sup>

### Animals

The fauna that came to the notice of the emperors, courtiers, chroniclers and artists at court can be divided into three categories; (a) those that were hunted; (b) those that were required for imperial purposes and; (c) those that were presented at court as oddities or rarities such as Burchell's zebra (*Equus (Hippotigris) burchelli*), common turkey (*meleagris gallopavo*), the

dodo (*Raphus cucullatus*), blue crowned hanging parrot (*Loriculus galgulus*), and the African elephant (*Loxodonta africana*). Interesting as these animals and birds are, they were not of the Indian landscape. There were other birds and animals such as the Barbary falcon (*Falco peregrinus babylonicus*) Siberian crane (*Grus leucogeranus* which are seen no longer in India), Sarus crane (*Grus antigone*), western tragopan (*Tragopan melanocephalus*), four-horned antelope (*Tetracerus quadricornis*) and markhor (*Capra falconeri*), which were either migrants to, or were residents of India which attracted the attention of the Mughal court. They however, do not give us any information of their landscape or their behavioural ecology. We shall therefore, confine ourselves to two examples in each of the first two categories only.

As Babur advanced into India he was amazed at the diversity of life he encountered. He was intrigued enough to record the animals that were in his path and presumably which he had not seen in Afghanistan or in his native Uzbekistan. He describes among others the elephant (*Elephas maximus*), the greater one-horned rhinoceros, the nilgai (*Boselephus tragocamelus*), the hog deer (*Axis porcinus*), the blackbuck (*Antilope cervicapra*), the chinkara (*Gazella bennettii*) and the rhesus macaque (*Macaca mulatta*). Since these animals were not found in his native lands, he unwittingly established the limits of their north – western range.

Neither the lion nor the tiger are listed by him as peculiar to Hindustan, the reason for this is simple enough. He was familiar with both in his homeland. He records having shot a tiger near Peshawar a few years earlier. Tigers in the Turkmen-Uzbek-Afghan border have been reported as late as c1970. Lions were still found in the northern and easterly directions of Tashkent c 1880 and they were “heard” of in the hilly areas around Kabul at the same time according to some

sources<sup>10</sup>. However, the British accounts of the Afghan wars of the 19<sup>th</sup> century do not record encounters with them. The Central Asian Prince from Samarkand was familiar with both the large cats that were then extant, even common in north India at the time. Though only a small part of the *Babarnama*, his autobiography, concerns India, the contrasts of landscape and fauna stand out. But, there were some creatures which were reassuringly familiar to him.

**Asiatic Lion** (*Panthera leo persica*).

Hunting had become a very important court activity by the time of Akbar's rule. His adoring chronicler, Abul Fazl, goes to great length to justify Akbar's penchant for it by recording that it gave him the opportunity to visit remote areas of the empire which were not otherwise likely to be visited, and see for himself the conditions of his subjects.<sup>11</sup> Under Mughal rule, the lion had become royal game in so far as only the emperor and his favoured relatives, courtiers or guests would be permitted to hunt it. Sir Thomas Roe was at Mandu in 1617 with Jahangir's encampment. He was much harassed by a lion which raided his camp. He had to seek special permission to tackle the menace "for no man may meddle with lions but the king."<sup>12</sup> Bernier on the other hand records that during the reign of Aurangzeb, large tracts *en route* the three great capitals were "guarded with utmost vigilance; and excepting partridges, quails and hares which natives catch with nets, no person, be he who may, is permitted to disturb the game, which is consequently very abundant" and "of all the diversions of the field the hunting of the lion is not only the most precious, but is peculiarly royal; for except by special permission, the king and the princes are the only ones who engage in the sport".<sup>13</sup> He also goes on to record that a successful lion hunt was a favourable omen, whereas if the lion escaped, it was "portentous of infinite evil



to the state”. A successful hunt would result in the dead lion being brought before the emperor who would sit formally in *darbar* with his nobles. The carcass would then be accurately measured and it would be minutely examined. A record would be made “in the royal archives that such a king on such a day slew a lion of such a size and of such a skin, whose teeth were of such a length, and whose claws were of such dimensions and so on to the minutest details.”<sup>14</sup> Akbar maintained a detailed record of his *shikar*, including the guns used by him.

Jahangir too, maintained meticulous records of his hunts. In the 11<sup>th</sup> year of his reign, that is in a span of 39 years during which he kept records of his *shikar*, he writes that he had either shot or was present at shoots when a total of 28,532 game animals and game birds were hunted which included 86 lions.<sup>15</sup> He shot a massive lion at Rahimabad near Agra in 1623, which weighed 255 kgs. and it was 9 feet 4 inches long<sup>16</sup> which ranks it as the 21<sup>st</sup> largest lion recorded in India<sup>17</sup>. The weight range of male lions is between 145 and 225 kgs.<sup>18</sup> which makes this lion the heaviest recorded in India. Jahangir was so impressed with his trophy that he ordered it to be painted, sadly the painting is lost. A thorough search made by me of all known records over two decades has resulted in collecting some details of only 77 lions shot in India between 1850 and 1950. One can only imagine what a wealth of information the court records would have had of Jahangir’s 86 lions alone which he shot in 39 years. No doubt he shot many more subsequently, which too would have been recorded along with the trophies of Akbar, Shah Jahan, Aurangzeb and possibly the trophies of the lesser Mughals. A search through the records of the time from Babur to Aurangzeb does not reveal any anxiety of the lion being rare in their domains. The enquiring eye of even Jahangir makes no such mention.

We must turn to paintings and hunting descriptions and methods to glean some details of its morphology and behaviour. The large Mughal caravans did move in some of the preferred habitats of the lion. Painters from the imperial atelier traveled with the entourage and recorded various events including those concerning lions on command, or as a matter of course. They have left us a superb visual record. There are more than 30 such paintings concerning lions in the public domain.<sup>19</sup> A few illustrations will suffice. A painting entitled “Prince Khurram attacking a lion” by Balchand c1640; “Shah Jahan hunting lions near Burhanpur” by Daulat 1635 both from the *Padshahnama*, the chronicle of Shah Jahan’s reign preserved in the Royal Collection at Windsor; “Aurangzeb hunting lions” by an unknown artist c 1670-1700 from the Chester Beatty Library, Dublin; “Lion drinking after devouring its kill” attributed to Nanha, c 1618 from the Maharaja Sawai Man Singh II Museum, Jaipur;<sup>20</sup> all depict the animal in open terrain. These very paintings give us an insight into the animal’s morphology. The manes of all the lions are scanty and not black as one sees to-day on most full grown lions of the Gir forest though there are many variants among the latter too. In contrast with the Mughal paintings, the paintings from the thickly wooded principality of Kotah in Rajasthan, tell a different story. Though in this school of art the animals are stylized, all of them are depicted in forested areas. A painting entitled “Maharaja Ram Singh I of Kotah (1695-1707) hunting lions at Mukundgarh” has two male lions, both with well defined dark black manes. Another painting titled “Rao Bhoj Singh of Bundi slays a lion” attributed to “Kotah Master” c 1720, has extremely light coloured stylized animals, the manes however, are full grown and are black in colour.<sup>21</sup>

Why do lions in Mughal paintings, unlike those depicted in the Kotah paintings, have light coloured scanty manes? Is it an adaptive variation evolved over millennia to suit an open

environment? The lions of the savannahs of Kenya, Tanzania and elsewhere on the other hand, have luxuriant dark manes. Why do the lions in the Mughal paintings not have dark manes? About one hundred lions live to-day outside the protected areas of Gir which are not likely to go back to thick jungles. The vegetation in such habitats is scanty, will these animals evolve into scantily maned males over the next several generations? We can raise these questions, but we have no answers at the present. It is noteworthy that lions in cold climates develop a thicker coat and one male lion from the Gir in the Berlin Deer Park, sports a heavy dark mane covering its abdominal fold right upto its groin. This growth (though the colour cannot be ascertained) is exactly what one sees in the Assyrian friezes of Ashurnasirpal's and Ashurbainpal's hunting scenes of c 860 and c 645 BCE now preserved in the British Museum, London. The same feature was seen on the now extinct Barbary lion (*Panthera leo leo*).<sup>22</sup>

Mughal paintings give us some idea of the lion's prey base as well. A painting titled "Akbar on a hunt" by an unknown artist c 1598-1600 from the National Museum, New Delhi shows Akbar slaying a lion with an arrow from horseback. The wounded lion is in the process of killing a wild ass (*Equus hemionus Khur*). The wild ass was a common enough animal in Gujarat, Rajasthan, Sindh and Punjab and the predator and prey shared wide open spaces. The *onagar* or the Persian wild ass (*Equus hemionus onagar*) was a prey of the lion in Iran too. There is a Persian miniature painting titled "Behram Gur hunting lions" by Sultan Muhammad, Tabriz 1539-93 from the British Library, London which depicts a lion shot by Behram Gur which is itself in the process of killing its prey, the *onagar*. Another painting titled "Animals" by an unknown artist c 1610 in the St. Petersburg *Muraqqa* (album) preserved in St. Petersburg, Russia, has a lion killing a nilgai, and another killing a chital (spotted deer, *Axis axis*), both of which prey animals continue to be

hunted by lions in the Gir to this day. The lion painting attributed to Nanha referred to earlier, shows the lion having eaten a cow. A painting titled “Landscape with lions and figures” of c1610 by an unknown artist recently auctioned at Christies Ltd., London, has Akbar surveying a scene which has a lion killing a nilgai while a lioness with three cubs sits across a small stream and looks on the proceedings. Besides her are a human skull and a ribcage, suggesting man eating!<sup>23</sup>

Of all the species of cats, lions are the only gregarious ones by nature. They live in prides and lionesses provide common care to cubs of the group unlike other cats, which are essentially solitary in nature, though some mothers and cubs or sibling coalitions are known in some species such as the cheetahs, and even some lions do become solitary. In 1562, Akbar came across a pride of seven lions near Mathura of which one was caught alive, while the rest were killed. In 1568, he came across two lions between Ajmer and Alwar. The text of the *Akbarnama*, Abul Fazl’s chronicle of his reign, is not clear regarding the sex of the animals<sup>24</sup>, but abiding coalitions of two male lions are a well known occurrence in lions of to-day in the Gir forest and in Africa. Actually, there is a special word in the *Kathiwadi* dialect of Gujarati, *belad*, for such pairs. Another similar instance is recorded by Jahangir in the year 1608 when he shot a pair of lions between Karnal and Panipat to “eliminate the evil”, since they had taken up residence by the roadside and were harassing the people.<sup>25</sup> In April 1617, Jahangir and Nur Jahan came upon four lions which were dispatched by the empress with six bullets from elephant back. This pleased Jahangir no end, and he presented her with a pair of pearls and diamonds worth two lakh rupees, no mean gift even for a Great Mughal!<sup>26</sup>

Nowhere in the records of the time do we find mention of large prides of the kind we see on the Serengeti plains in Tanzania or Masai Mara in Kenya. In the Gir, I have seen very large prides, the largest being of 21 animals, but this was at a time when lions were fed artificially and a regular supply of food was available to them to sustain such a large group. Once this feeding stopped, the prides became smaller, one sees these days groups of six or seven animals or thereabouts. It is likely that while the food was aplenty during the Mughal empire, the prey animals were not as concentrated as in some parts of East Africa which have large prey such as the African buffalo (*Syncerus caffer*), which can provide sufficient food for a big pride.

Upon the death of Aurangzeb in 1707, the era of the Great Mughals came to a close. In the chaotic times between the beginning of the 18<sup>th</sup> century and the revolt of 1857 it is difficult to trace the lion. However, a few indications of what happened to it are available. Lions were found all over North India in the first half of the 19<sup>th</sup> Century. William Fraser, shot 84 “being personally responsible for their extinction in the area (of Punjab & Haryana)” c 1820. In the 1830s Maharaja Ranjit Singh’s lancers bayoneted them near Lahore. In the 1850s, a Colonel George Acland Smith is reputed to have killed more than 300 of which 50 were from the Delhi region, the rest being from Central India. Ten lions were shot in Kotah around 1866 and Raja Bishan Singh of Bundi shot upwards of 100 around the 1840s. A colonel ‘D’ killed 80 lions c 1857 and Captain William Rice shot 14 in one shoot in Kathiawar about the same time. The author’s own estimate is that about 1500 lions were shot between 1820 and 1880 in India outside the Kathiawar peninsula.<sup>27</sup> The 18<sup>th</sup> century and the first half of the 19<sup>th</sup> century appear to have been very unfortunate for them and in the 19<sup>th</sup> by 1880, they were only to be found in the

Kathiawar peninsula. Even the relatively small numbers of lions shot or killed were enough to tip the scales against them.

### **Indian Tiger (*Panthera tigris tigris*)**

Unlike lions, tigers are rather sparsely noticed in Mughal records. This is not surprising at all.

The animal's preference for thick cover, their solitary nature, their nocturnal habits, their absence from grasslands and generally from scrub jungles, made them very elusive. They were not likely to be met with frequently in the path of imperial peregrinations. The lion was royal game, tiger was not. Jahangir mentions it but once when he shot it in 1607 near Giri on the Malwa Plateau. He took the opportunity to find out the cause of its bravery, so he had it dissected. He concluded that it was a result of the location of its gall bladder inside the liver and not outside, as is the case in other animals. (The word for the animal in the text is *sher babr*, Persian for tiger the word for the lion in Persian is *shir*. I take it as such, though the translators have confused the animal with the lion as happens ever so often in India to-day, where in Urdu/ Hindi *sher* is usually translated as tiger and *babr sher* as lion).<sup>28</sup>

An extensive search has brought to light only two paintings concerning tiger encounters which are in the public domain. One of them which records a chance encounter, is very well-known. It is a double page painting titled "Akbar slays a tigress which attacked the royal cavalcade", from the *Akbarnama*, preserved at the Victoria & Albert Museum, London.<sup>29</sup> Akbar was returning to Agra from Malwa in 1561, when his cavalcade was attacked near Narwar by a tigress and her five sub-adult cubs. The mother was slain with a sword by Akbar himself and the rest were dispatched by his entourage. The double page painting verso is painted by Basawan and Sarwan

and recto by Tara Kalan and Basawan. While the text of the *Akbarnama* extols Akbar's bravery, the painting is a graphic presentation of the event. Of abiding interest is the colour of two of the cubs on the right hand page which is described by Robert Skelton as "light fawn". This is not a natural colour of tigers at all. In fact, it is the earliest known record of albinism or white colouration amongst tigers, in other words of "white" tigers.<sup>30</sup>

The other painting is the one titled "A royal hunting scene" from the National Museum of Pakistan, Karachi. It appears to be a copy made at Lucknow between 1780 -90 from an earlier mid-17<sup>th</sup> century version, according to Asok Kumar Das. It shows Shah Jahan on elephant back with horsemen and foot soldiers facing two tigers with a thick forest behind them. They have obviously been beaten out of the jungle into the open for the shoot. It must be noted here that apart from these paintings tigers do appear as part of the animal world in the various paintings in the *Anwar-i-Suhaili*, the Persian rendering of the *Panchatantra*, the classical fables of Ancient India. Asok Kumar Das who examined *Muraqqa-e-Gulshan* prepared for Emperor Jahangir, preserved in the Gulistan Palace Library, Tehran with some of its folios preserved in Staatsbibliothek, Berlin, notes that the tiger appears in the *hashiyas* (margins) of the paintings in it. They contain monochrome drawings in black and gold and depict among others, a tiger behind a hilly outcrop, a tiger hunting chital, a Rajput nobleman shooting a tiger with a gun and son on. The tiger also appears along with cheetahs, the blackbuck, the caracal (*Caracal caracal*) and other animals in the *Razmnama*, the illustrated Persian translation of the *Mahabharata* the great Indian epic, which Akbar commissioned.<sup>31</sup>

The lion continued to occupy centre stage until the British came on the scene. As lions became rare, the tiger took its place. The British introduced the telegraph, the railways, the motor car and the high powered rifle. In spite of these “advances”, there were still about 40,000 tigers at the dawn of the 20<sup>th</sup> century according to E.P. Gee, though M.K. Ranjitsinh and Kailash Sankhala settled for a figure between 30,000 to 25,000.<sup>32</sup> What happened to the animal thereafter is as they say, history.

This brings us to the second category of Animals, which were required for imperial purpose.

### **Asiatic Cheetah (*Acinonyx jubatus venaticus*)**

Coursing blackbuck (*Antelope cervicapra*) with tame cheetahs was an important form of sport. As such, there was a constant demand for them to be procured from their natural habitat. There is a crucial difference between the Mughal approach to the lions *vis-à-vis* the cheetahs. The former was an object, the ultimate object being royal game, of *shikar*, to be dispatched in style when encountered. The cheetah on the other hand was to be caught and trained after taming it, as an instrument of *shikar*. Consequently, the lion finds mention in *shikar* encounters, the cheetah on the other hand was treated like other animals used by humans such as the elephant and the horse. It appears in the records in great detail. Everything that needed to be known was recorded and some of the material survives to this day.

There is no contemporary record of Babur or Humayun hunting with cheetahs. But, Akbar took to the sport at a very young age and became in time a keen patron at trapping them from the wild, having evolved in the process, a totally new method to do so. In his half-a-century long



reign, he is reputed to have collected 9000 cheetahs as noted by Mutamad Khan, a chronicler of Jahangir's reign. According to Jahangir himself, his father had a thousand cheetahs in his stable at one time.<sup>33</sup>

Such a vast enterprise required a continuous supply, which in turn required an organization within the apparatus of the Empire to fulfill the demand. *Mirat-i-Ahmadi* of Ali Muhammad Khan, which is an account of Mughal administration in the early 18<sup>th</sup> century, states that the *daroga*, administrator, of Gujarat had to ensure that sufficient number of trainers to catch, tame and train cheetahs were available. There were 22 of them at the time and sufficient funds were set aside for maintaining the establishment. All appointments were made as per the instructions received from Delhi under the seal of the *qurawalbeg*, master of the hunt. Jean De Thevenot who visited Ahmedabad in the early years of Aurangzeb's reign, also notes that only the governor of the province could trap cheetahs and no one else was allowed to do so.<sup>34</sup> The cheetahs appear to have been a monopoly of the Empire. Moreover, catching them required considerable skill and maintaining them till they were sold was an expensive proposition. They, therefore, do not appear to have become a commodity in the market place, though some animals were surely traded for the nobles of the court and local rajas.

Through contemporary records we can identify prominent areas in which cheetahs were caught. In the Punjab and Haryana of to-day, they were caught from the environs of Pattan, Sunam, Bhatinda and Bhatnair. In Rajasthan they were caught from Jhunjhunu, Nagaur, Jaisalmer, Jodhpur, Merta, Fatehpur, Amarsar and Bari, and across the Chambal River from Sumanli in present day Madhya Pradesh. In Gujarat, they were caught from Bedi Bandar near Jamnagar,

Palanpur and the environs of Ahmedabad.<sup>35</sup> While this list is not exhaustive, it is clear that cheetahs were caught from grasslands and scrub jungles, many of which survived till the 1950s. Cheetah paintings of the time are ample proof of the landscape. Just three examples will suffice to illustrate the point. A painting titled “A family of cheetahs in a rocky landscape” attributed to Basawan c 1570, in the collection of Prince Sadaruddin Aga Khan, Geneva, shows a family of a male and a female with four cubs frolicking about. They are out in the open. Incidentally, this is a very rare representation of cheetahs in their natural surroundings. An untitled painting from the Aurangzeb Album in the Maharaja Sawai Man Singh II Museum, Jaipur, shows a cheetah and a caracal in a flat open landscape. Another in the Rietberg Museum, Zurich has a cheetah stalking a mountain goat (*Capra hircus*).

Another painting titled “Antelope and deer hunt” by Goverdhan c 1607-1610 in the Cleveland Museum of Art, Cleveland, Ohio, also shows all the animals in a clear landscape with rocky outcrops in the background. In fact, the painting in question is a study of the predator and its prey base. The cheetah is depicted killing a blackbuck, whereas a nilgai pair, a hare (*Lepus nigricollis*), a chital and a Punjab urial (*Ovis vignei*) make up the rest of the landscape along with a man with a knife ready to perform *halal* the orthodox Muslim method of animal slaughter, on the blackbuck which would be taken away from the cheetah and it could then be eaten.

One must ask the question why Rajasthan and Gujarat dominate among the cheetah catching centres. After all, cheetahs were found as far east as Deogarh in Bihar and as far south as Mysore and beyond and they were found in the north in Afghanistan as well. Ali Muhammad Khan states that the cheetahs from Gujarat are better and superior, to the cheetahs from other places. Akbar’s

governor of Delhi, Muhibb Ali Khan Khass Mohalli, states in his *Baznama*, (treatise on falconry), that the mountain cheetah favours shade and runs little because in mountainous regions there is shade and cover and the animal takes its prey without having to run. Whereas, the desert cheetah – the animal of arid regions or grasslands -is the best for hunting with, as it runs fast for long distances and does not require shade. The *Baznama* of Tonk at the Oriental Institute, Tonk, Rajasthan, dated to the middle of the 19<sup>th</sup> century, is a record of earlier traditions whose authorship is unknown. It states categorically that the cheetahs found in Multan and the forests of Lakhi are short in height, intrepid and swift. These animals are taller than those found in the Deccan.<sup>36</sup> According to a study of M.K. Ranjitsinh the blackbucks of Gujarat, Rajasthan and the Punjab regions are/were larger than the animals found elsewhere in the country. They are representatives of *Antelope cervicapra rajputanae* which are larger than the nominate race *Antelope cervicapra cervicapra*.<sup>37</sup> It is not surprising that the Mughals found cheetahs of these regions more suitable for their purposes as not only they were more adapt at tackling larger prey but also, because they were creatures of the open grasslands. They were ideally suited for the swift, long chase in a hot climate of the plains frequented by the imperial cavalcades.

At court, cheetahs were looked after with great care. During Akbar's reign they were divided into eight different classes. Their food was regulated specifically for each class and the quantity of food in each suggests that the classification was based on the age of the animals. They were kept in "sets" of 10 each and 30 of them were *Khasa*, special, animals, favourite of the Emperor. Many had names such as *Madankali*, *Daulat Khan* and *Dilrang*. The last two named were drowned while crossing the Ganga in 1574 and an other of Akbar's favourite, one *Samand Manik* was carried around in a special palanquin with a *naqqara*, a drum, being beaten in front of it.<sup>38</sup>

Since the purpose of keeping cheetahs was to hunt with them, details of their methods of catching, training and coursing with, were maintained. According to a hunting tradition of the time it was said that when a cheetah ran after its prey, it flew, whereas a *shaheen* (*Falco peregrinus peregrinator*), only walked when it swooped down on its prey! This is the reason why many *Baznamas*, of the time have chapters on hunting with cheetahs. For our purposes we need not go into the details of the training programme. Suffice it to note that hunts were closely watched and noted. In one instance we have the incident of 1572 at Sanganer, the site of the present day Jaipur airport. Akbar was hunting there when a blackbuck jumped across a 25yds wide *nullah* or rivulet, his cheetah, *Chitr Najan*, jumped after it and brought it down. The feat was so unexpected that Akbar ordered that the cheetah be given a jewel studded collar and a drum was beaten in front of it.<sup>39</sup> This event is commemorated in a painting by Lal and Sanwla titled “Akbar hunts with trained cheetahs”, from the *Akbarnama*, preserved at the Victoria and Albert Museum, London.

Jahangir on the other hand, set up an experiment during a hunt in 1619 at Palam, the present location of Delhi’s international airport, which was one of the imperial hunting grounds. He had heard that an antelope would not survive if it had been brought down by a cheetah. In order to find out the fact, he had several antelope from the 24 caught by the cheetahs during the hunt, released from cheetah and kept in his presence. He noted that they behaved normally for 24 hours, but soon became disoriented and did not survive inspite of being sedated with an opium preparation.<sup>40</sup>

We now turn to two unique facts about cheetahs, which we know only because of Jahangir's keen observations which he recorded in his own hand. In 1608, Raja Bir Singh Deo of Orcha, a faithful friend and courtier, brought a *yuz-i-safed*, a white cheetah, to show him. Jahangir was so wonderstruck that he described the animal in detail: "Its spots which are (normally) black were of blue colour and the whiteness of the body was inclined to the same colour". This phenomenon happens because of a recessive gene at the D (dilution) locus. This locus frequently produces an allele "d" which results in a bluish phenotype. The eye colour is normally unaffected, but the black of the coat is bluish, while the yellow becomes cream coloured according to Colin P. Grovers. This is the only recorded instance of a white cheetah till date. Jahangir notes that he had never seen a white (*tuyghun*) cheetah though he had seen many white animals and birds such as the *shaheen* (*Falco peregrinus peregrinator*), *basha* (Eurasian sparrowhawk, *Accipiter nisus*), *shikra* (*Accipiter badius*) which in Persia is called *bighu*, noted Jahangir (however, the *shikra* is called *Pighu-ye kuchek*, whereas the Levant sparrowhawk, *Accipiter brevipes*, is called *Pighu*, in current usage in Iran), *kunjashk* (any small bird, but usually the word signifies sparrows), *za-ag* (house crow, *corvus splendens*), *kabk* (chukor, *Alectoris chukar*), *durraj* (grey francolin, *Francolinus pondicerianus*), *podna* (could be common quail, *cocturnix coturnix*, or rain quail, *coturnix coromandelica*, or jungle bush quail, *Perdicula asiatica*, or rock bush quail, *Perdicula argoondah* which were the most likely to be seen by Jahangir ), *taus* (pea fowl, *pavo cristatus*), *baz* (the word is often used to denote hawks in general, but in this context it means the Northern goshawk, *Accipiter gentilis*, as Jahangir has accurately identified different hawks with their specific names), *mush-i-paran* (flying squirrel, of which there are 11 different forms in India), *ahu-i-siyah* (blackbuck, *Antilope cervicapra*) which he noted was to be found only in Hindustan and chinkara (*gazella bennettii*). He goes on to record that the white chinkara is called *safida* in

Persia.<sup>41</sup> Quite incidentally, here we have an extensive record of albinism among fauna and avifauna seen in the country at the time.

It is a well known fact, that cheetahs were very difficult to breed in captivity until recently. Jahangir wrote in his autobiography that in 1613, one of his tame cheetahs slipped its collar and mated with a cheeti, a female, and after two and half months she gave birth to three cubs. The uniqueness of the event was not lost on him, he noted that though his father had a 1000 cheetahs and he had tried to mate them, he had failed; yet in his own reign, the rare event took place. He goes on to write “This has been recorded because it appeared strange”<sup>42</sup>. It is the only recorded instance of cheetahs breeding in captivity until 1956, when the Philadelphia zoo bred them successfully. Scientific knowledge of the 20<sup>th</sup> century enabled us to understand the reasons for the previous failures and ultimately succeeding in breeding them in captivity, but it was a different matter in the 17<sup>th</sup> century.

The cheetahs traveled wherever the emperors went, along with their trainers, caretakers and bullock carts from which they were launched after their prey. They hunted blackbuck as they moved on or pitched tent. Usually, cheetahs were used for coursing in open country, but sometimes they were launched after their quarry in a *shakhbandh*, a stockade, which was one of the two acknowledged hunting methods of the time, the other being the *qumargah*, a battue i.e. driving game, within an ever decreasing circle of men with trapped game being hunted inside it, from elephant back or horseback.

In 1567 Akbar staged a hunt near Lahore. According to the *Akbarnama*, a *qumargah* was ordered and the “birds and beasts” were driven together from near the mountains on one side and from river Bihat (Jhelum) on the other. “Each district was made over to one of the great officers and *Bakshis*, *Tawacis* and *Sazawals* were appointed to every quarter. Several thousand footmen were appointed to drive game...”. The circle at the commencement of the hunt was 10 miles in circumference which decreased and the game was concentrated in it. Akbar himself hunted for five days before allowing the grandees of empire and others to take the field.<sup>43</sup>

Abul Fazl does not describe the animals in the hunt, but fortunately the *Akbarnama* at the Victoria and Albert Museum, London has a double page illustration of the event. The right hand page executed by Miskin and Sarwan and the left hand page by Miskin and Mansur encapsulate the animals and the chase. The painters were among the best in Akbar’s atelier and knew their subjects well. Mughal painters routinely traveled along with the imperial entourage. There is one variation though, the text records a *quamargh*, while the accompanying painting however, depicts a classic *shakhbundh*!

The animals we know were driven from the Salt Range and from the plains below. The cheetahs are seen in various stages of the hunt, being released, coursing and bringing down the quarry. The blackbuck are well represented. The full grown black males, sub adult dark fawn males and females are accurately drawn. A water carrier skins a blackbuck to make a skin container to carry water and there is even an accurate rendering of a blackbuck head with deformed horns. Additionally, there is a hyaena (*Hyaena hyaena*), small Indian civets (*Viverrica indica*), a dead markhor (*Capra falconeri*, which was not found in the Salt Range and it is a strange inclusion in

the painting) and several Punjab urial (*Ovis vignei*) which were found in the Salt Range and some survive there to-day, nilgai, chital, Indian hare (*Lepus nigricollis*), and animals that look like Indian foxes (*Vulpes bengalensis*) and jackals (*Canis aurius*). Though the thrust of the *Akbarnama* is the hunting prowess of Akbar, the very rendering of the painting gives us an extensive record of the larger mammal wealth of the region.<sup>44</sup>

That the cheetahs were plentiful at the time is evident from the fact that the emperors maintained such large numbers in captivity as also it is evident from the fact that nowhere they are recorded to be rare. And yet, an extensive search, if not an exhaustive one through various sources by Mahesh Rangarajan and myself, has given us only 229 definite references to cheetahs between Tipu Sultan's sixteen cheetahs in 1799 and our own times, though surely many escaped detection. This is an indication that they became rare in early 18<sup>th</sup> century period. They certainly came under immense pressure during the 16<sup>th</sup> and 17<sup>th</sup> centuries, since so many were taken from the wild for hunting purposes, a practice which continued till the animal became nearly extinct in India.

### **Asian Elephant (*Elephas maximus*)**

Just as the cheetahs were required for fulfilling an activity at court, so were elephants which were an integral part of court life, *shikar* and they were used on the battlefield. Both these animals were instruments of certain objectives and neither was an object of the hunt. Actually, *shikar* of the elephant became a "sport" under the British who saw it as a manly pursuit of the



military officers, administrators and *boxwallahs*, European traders and businessmen, who went after trophies of lions, tigers, rhinos and other mega species.

It is estimated that there were between 750 and 1000 war elephants in the *pilkhana*, elephant stables, of the Delhi Sultanate at the height of their power in the early 14<sup>th</sup> century, whereas the numbers had declined to a little below 500 after 1350 during the reign of Firoz Shah Tuglaq. Under the Mughals, the figures are confusing. Simon Digby notes Jean-Baptist Tavernier's varying figures from 400 to 30,000 which he had collected! However, Tavernier enquired from the keeper of the royal elephants at Shahjahanabad, Delhi, during the reign of Shah Jahan and was informed that he had 500 elephants of the household in the imperial stables, of which only "80 or at most 90" were used for warfare.<sup>45</sup> It must be stressed that this figure is of one stable, there were several other stables within the realm apart from those owned by nobles, princes, landlords and others. The low figure of elephants used in warfare is not surprising. In 1526, Ibrahim Lodi is reputed to have put 1000 in the field at Panipat. However, he lost to Babur's deadly muskets. By the time of Shah Jahan, small canons which could be easily manhandled on the battlefield, had become an established instrument of war. The elephant's role in warfare had diminished, though they were used as lookout posts, standard bearers and as mounts for the emperors and generals. They were also used as draft animals and they continued to be so used by the army of the East India Company and the British Indian Empire upto the 1870s and beyond. Actually, the Madras Presidency had to pass an act early as 1870 followed by an act of the Imperial government in 1879, to prevent indiscriminate destruction of elephants to ensure their steady supply for military use. They were used for logging operations almost upto the present day, as indeed, they are used in Myanmar for this purpose to this day.

However, there is another estimate of elephant numbers which must be noted as it gives a somewhat different picture. In an unpublished paper presented by Shireen Moosvi at a symposium “Call of the Elephant” held at the Indian Museum, Kolkata, 18-19<sup>th</sup> August 2001, she estimated that there were 5000 elephants with the Mughals c1595, while their courtiers had another 2,800. Her estimate for the total captive population in the empire is about 17,000. The number of elephants in the Mughal stables increased to 12,000, with 40,000 in the empire during Jahangir’s reign. The latter figure appears to be a total of both captive and wild populations.<sup>46</sup>

That there was a continuous demand for elephants and they had to be caught from the wild was inevitable. Records of the time are replete with information on localities from where elephants were caught. Irfan Habib’s atlas, which is a remarkable cartographic representation distilled from contemporary sources of the Mughal Empire, gives us a clear idea of such locations. From Hardwar to the Gandak river and beyond right upto Assam along the Shivaliks, the Terai and the foothills of the Himalayas to Murshidabad in Bengal and the Sunderbans in Bengal were their habitat. In western India, they were to be found at Dohad on the border of Gujarat and Madhya Pradesh and from the west of the Malwa plateau to Sarguja in Chattisgarh. Additionally, there were other areas including those that were not part of the Mughal empire from which elephants were procured.

Akbar himself took part in an elephant catching foray at Sipri between Mandu and Agra, where he was impressed by a wild male from a herd of seventy which were caught. The male broke the fort wall and ran off but was caught again and became a *khasa* elephant with the name

*Gajapati*,<sup>47</sup> king of elephants. On his return from Gujarat, Jahangir encamped at Dohad in 1618 where he ordered a *quamargah* and with the help of tame elephants the hunt began, but the circle was broken and only a few elephants were caught. Of these, two male elephants impressed him very much and whom he named *Ravant Bir* and *Ban Bir*, because they were caught near a hill by the name of *Rakas (Rakshas) Pahar or Demon hill!*<sup>48</sup> To-day there are no elephants there or at Sipri and hardly anything survives by way of a forest which can sustain them.

Abul Fazl devotes lengthy passages to the elephant in the *Ain-i-Akbari*, the official record of the Mughal Empire during Akbar's reign. He notes that the elephant has the bulk of a mountain and the ferocity of a lion. "It adds materially to the pomp of a king". The animal adds to the "success of a conqueror and is of the greatest use for the army. Experienced men of Hindustan put the value of a good elephant equal to five hundred horses... When guided by a few bold men armed with matchlocks, such an elephant alone is worth double that number".<sup>49</sup>

That the elephant occupied a prominent position at court is amply recorded. Akbar was known for his love of elephants. His tackling of a fierce elephant name *Hawai*, and his subduing of an other *Ran Bagha*, are the stuff of legend. Jahangir's interest in elephants was not all pervasive like his father's, but he was nonetheless, very fond of them and took a personal interest in their wellbeing, to the extent of providing warm water for bathing them in winter! They were also used as gifts to dignitaries, nobles and other personages of importance. Such interest continued with Shah Jahan and Aurangzeb, who also continued using elephants for the hunt as Jahangir had done before them. A "white" elephant was an object to be prized though it was not considered of any significance of a divine nature as it was in Buddhist countries. A "white" elephant from Pegu

came in for special mention and Dara Shukoh's white elephant was painted by a court painter believed to be Bichitar. A *daryai hathi* (African elephant) was painted by an unknown artist during Aurangzeb's reign.<sup>50</sup> It is so accurately rendered, that its morphological features which differ from the Indian elephant are clearly noticeable.

With his keen interest in matters concerning animals, Jahangir gives us an idea of the price of a good elephant. He records that in 1608, Ratan, a son of a Rajput nobleman, presented him with three elephants, the best of which became one of his *khasa* elephants. It was valued by the *pilkhana* officials at Rs. 15,000. He goes on to comment that formerly the elephants of the great rajas of Hindustan cost no more than Rs. 25,000 but "they have now become very dear". An elephant presented to Shah Jahan named *Mahavir Deo* was valued at Rs. 3,00,000. This arguably is the most highly priced elephant recorded. On the other hand Shireen Moosvi records a price of between Rs. 5,000 and Rs. 2,500 for "more ordinary" elephants from Masulipatam in the years 1661 and 1662.<sup>51</sup>

As in the case of the cheetah, Abul Fazl describes the elephant in detail. He notes different "types" of elephants: *Bahadur* is well proportioned and brave; *Mand* is black, has yellow eyes, it is wild and is unmanageable; *Mirg* has whitish skin with black spots and; *Mir* has a small head and obeys readily. He also records their habits, diet, mating and gestation period and says that hitherto elephants were not bred in captivity, as it was considered unlucky, but on Akbar's orders "They now breed a very superior class of elephants". The imperial stables carefully classified elephants into seven classes with food, care and servants provided to them according to the needs

of the animals in each class. The elephants were regularly mustered for Akbar's inspection and the *khasa* elephants were specially earmarked for his use alone.<sup>52</sup>

Shireen Moosvi has given a figure of 40,000 elephants in the Mughal empire towards the close of the 16<sup>th</sup> century. R. Sukumar has noted that the distribution of wild elephants at the end of the Mughal empire's zenith remained unchanged until the British opened up the country by the middle of the 19<sup>th</sup> century. G.P. Sanderson, a renowned hunter and chronicler of British Indian sport, wrote as late as 1896 that the wild elephant "abounds" in most of the large forests from the foothills of the Himalayas throughout the peninsula to the extreme south.<sup>53</sup> To-day the situation is desperate. R. Sukumar estimates the population to be between 26,390 and 30,770 for all of India. The figure according to him for North-west and Central India is between 3,150 and 3,700<sup>54</sup> which approximates to the Mughal empire's heartland, though some areas of the North-East and South India which were either under Mughal control or were sources of supply, are left out. According to *Alamgir Nama* of Muhammad Kazim which is a record of Aurangzeb's rule, Assam had 4 or 5 places in it which could supply 500 to 600 elephants every year<sup>55</sup> and no doubt the jungles of Mysore too were an important source of supply, especially since Aurangzeb spent a major portion of his reign campaigning in the south. On the other hand *Mirat-i-Ahmedi* laments that elephants were no longer to be found at Dohad as their routes of migration were now under human habitation,<sup>56</sup> a startling change between the reigns of Jahangir and Aurangzeb.

### **Conclusion**

As far as lions are concerned, the Mughal records do not mention or sound an alarm that they were a rarity in the landscape. Interestingly, the Gir forest, the current home and the last bastion of Asiatic lions was a distant place in a far off corner of the empire. It was believed to be only about 90 sq. kms. in area. When it was measured in the Great Trigonometrical Survey of 1875-76 it was found to be 96 kms. in length and 48 kms. in width with an area of 3,109 sq. kms.<sup>57</sup> Since lions were royal game they were protected fitfully upto 1947 in the Princely State of Junagadh ruled by the Nawabs of the Babi dynasty, and that is the reason for their survival today.

We know that lions were found all over North India upto the first half of the 19<sup>th</sup> century from British records, though they were far from being numerous and the game was pretty much up for them by 1880 outside the Kathiawar peninsula. The chaos and disintegration of the empire which followed Aurangzeb's death in 1707, resulted in the paucity of central records. The period between early 18<sup>th</sup> century to the first half of the 19<sup>th</sup> century leaves a void of information. Provincial courts had records some of which survive and they need to be examined to elicit information.

The tiger was of peripheral importance to the Mughals because their preferred habitat was not frequented by the Mughals and their peripatetic entourage! While Jahangir's memoirs are replete with records of flora and fauna and other natural phenomena, there is only one instance of a tiger being alluded to, by Jahangir as we have noted earlier.

We know that human population grew at a very slow pace upto the middle of the 19<sup>th</sup> century. Tigers were so plentiful in the 19<sup>th</sup> century that bounties were paid for their destruction and the

Bombay Presidency had a special officer appointed to shoot them. It is estimated that between 1875 and 1925 more than 80,00 tigers along with 150,000 leopards and 200,000 wolves were destroyed.<sup>58</sup> Yet in spite of this wholesale carnage, possibly as many as between 25,000 and 30,000 tigers survived in India as noted earlier. To estimate the number of tigers under the Mughals would be an exercise by itself. Suffice it to say that their habitat was under the least pressure with sufficient prey to enable them to survive in large enough numbers for the British, who had to pay to destroy them in the interest of 'development' c 1900 and later. The post-independence era has driven them to the brink of extinction. As per the latest count, the total number of tigers at the present is between 1,165 to 1,657 only.<sup>59</sup>

The cheetahs on the other hand were removed in very large numbers from their natural habitat throughout this period, as the *Mirat-i-Ahmedi* and other sources testify. They suffered from all sides as both males and females were captured, leaving the cubs unprotected by their mothers. Additionally, they did not breed in captivity barring one instance. Thus, the Mughal hunts appear to be a major cause of the decline of the cheetahs. It is not surprising that there are such few records of cheetahs between the end of the 18<sup>th</sup> century and the middle of the 20<sup>th</sup> century upto its extinction.

The elephants like the cheetahs were removed in large numbers from their natural habitats. Yet they survived in appreciable numbers because their habitat is thick jungle, shared with the tiger. It was the last to come under human pressure with increase in population from the middle of the 19<sup>th</sup> century and the opening up of the country at that time. The cheetah's grassland habitat came under pressure much earlier. This habitat was shared by the lions as well. Both were easy to see

in daylight and hunt or capture. Consequently, the lion became extinct earlier – barring the relict population of some 360 animals in the Saurashtra (Kathiawar) peninsula which survives to-day. It was soon followed by the cheetah. It was last sighted in the winter of 1967-68 in the jungles of Central India, 87 years after the last lion was reported in India outside its peninsular sanctuary.

The sophisticated knowledge of the natural world in the 16<sup>th</sup> and 17<sup>th</sup> centuries is astounding. For most researchers of environmental history though, the pre-British period is a *tabula rasa* in spite of the fact that Salim Ali published his seminal papers on the subject as early as 1927-28.<sup>60</sup> However, the study of this period is vital, as the Mughals were the precursors of the British experience from which the Indian Republic has inherited its natural wealth. Yet another interesting facet of the period is the importance of the visual materials as a vital source of information of extinct ecologies and landscapes, which are often not noted in the written records.

The Mughals lived by the tenets of their times, their sport and pastime hastened the decline of some mega species and yet, they survived, albeit in reduced numbers, the empire of the great Mughals.

(I am grateful to Dr. M.K. Ranjitsinh, Dr. Asok Kumar Das and Dr. Mahesh Rangarajan for their critical comments which have enriched this paper. Its shortcomings are mine alone).



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