

Free-ranging Spotted Deer (*Axis axis*) in Chennai, India



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Spotted Deer or Chital (*Axis axis*) is a medium-sized cervid endemic to South Asia. The largest population of spotted deer is found in India, where it can be seen in suitable habitats across the country, except in the northwestern arid plains and the higher reaches of the Himalayas (Schaller, 1967; Raman, 2015).

The history of spotted deer presence in Chennai city is somewhat murky. There are unpublished reports of spotted deer straying into parts of Tambaram from the forests of Vandalur during the early years of the twentieth century (Anandhapriyan, 2016). Well-known naturalist and wildlife photographer M. Krishnan has, however, stated that the spotted deer is an 'introduced' species (Krishnan, 1972). According to him, there was a small herd of spotted deer held captive within a paddock in the Government House of erstwhile Madras. Around the time of India's independence in 1947, these deer were released inside the 'Guindy Lodge', a wilderness area that surrounded the Raj Bhavan (Shanker, 2014). It was here that the well-known Guindy Deer Park was first established and years later, in 1978, the Guindy National Park came into existence (Raman *et al.*, 1996).

Although M. Krishnan's views have been generally accepted, another little-known book has provided some interesting, if not contradicting, insights. According to the author, Isabel Savory, a British hunter who travelled in India towards the end of the 19th century, the 'Guindy Park' was already 'overstocked' with spotted deer (Savory, 1900). It appears that the spotted deer has had a much longer history in Chennai than previously thought. Only further research can reveal whether all the deer found in the city have descended from an introduced stock.

Spotted deer continue to thrive in Chennai. However, there is little authentic information on its population size. One of the earliest studies undertaken on the deer was in 1968. According to this study there were 825 deer inside the Guindy Deer Park (Barnard *et al.*, 1969). The population size inside the Guindy National Park as estimated in 1991, was 482, and in 1992, it was 622 (Raman *et al.*, 1996). Today the spotted deer is found in many other localities inside the city. Outside the Guindy National Park, the deer number is the largest within the adjoining Indian Institute of Technology Madras (Care Earth, 2006). Smaller sub-populations exist within a few institutional areas in the vicinity and are also somewhat far removed in Tambaram at a distance of nearly 20 km south of the Guindy National Park. Other than these, there are small free-ranging herds locally especially in Vandalur and Urapakkam (pers. obs.).

Free-ranging herds were very common in the residential areas of Velachery about a decade ago (Daniels, 2013). However, there are hardly any free-ranging deer that can be seen at present. The first author of this paper, who lives in Velachery, closely monitored free-ranging herds over a period of six years between July 2006 and June 2012. Herds that foraged locally used to enter an open, unused park right in front of her apartment to rest. This occurred on a daily basis and it was possible to get close to the deer and directly count every individual without disturbing them. Herds were small and nearly 60% of the herds encountered were of three or fewer deer. Only once a herd of 12 deer was observed (Daniels, 2013). When the six years' data was scrutinized, a steady decline in the number of herds became evident (Figure 1).

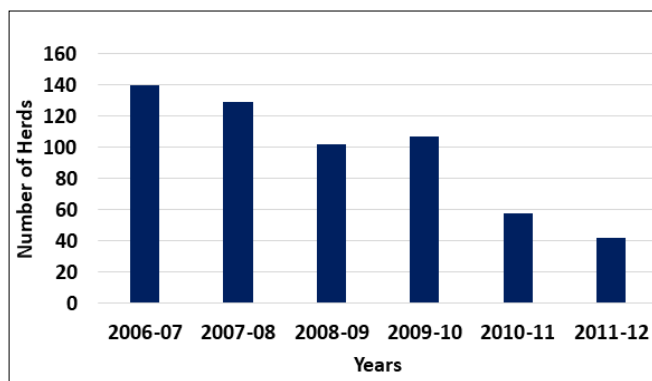


Figure 1: Declining trend in the number of free-ranging herds of spotted deer encountered in Velachery (Source: Daniels, 2013).

What exactly triggered the decline in the number of free-ranging herds between 2006 and 2012 is not fully clear. It is possible that free-ranging spotted deer constantly seek better sources of food and safer habitats and are, therefore, prone to dispersion. The availability of food is known to induce dispersion (Raman, 2015). Movement of free-ranging herds has also been reported elsewhere. In a recent article published in *The Hindu*, it was reported that spotted deer regularly move back and forth through a 'corridor' between the Vandalur reserve forest and Selaiyur in East Tambaram (The Hindu Bureau, 2024). It is possible that there are a few more corridors.

Spotted deer in Chennai has apparently survived in the form of a dynamic 'meta-population'. Periodic dispersion of small herds may have played a role in keeping the sub-populations inter-connected. It is therefore important to manage the spotted deer in Chennai in a way that sub-populations do not get totally isolated and there is scope for continuous exchange of animals between them. The Chennai Metropolitan Area covers more than 5000km². Priority should be to map the distribution of the spotted deer within this vast area and identify the various sub-populations and important corridors that keep them connected. Such an exercise will immensely help in the long-term management of the deer in Chennai.

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CONFLICT OF INTEREST

The authors have no competing interests to declare that are relevant to the content of this article.

DATA AVAILABILITY

Data will be made available on request from the first author Rosella Daniels.

AUTHOR CONTRIBUTIONS

Rosella Daniels: Design the study, data collection, curation and analysis, and drafting the manuscript.

Sarangan Prabakaran: Scrutinizing data, vetting the analysis and interpretation of results, editing and finalizing the manuscript.

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