

Recent records of Ruddy Mongoose *Herpestes smithii* and Brown Mongoose *H. fuscus* from Kerala, southern Western Ghats, India

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Abstract

Camera-trapping and direct observation recorded Ruddy Mongoose *Herpestes smithii* in Parambikulam Tiger Reserve and Chinnar Wildlife Sanctuary, and Brown Mongoose *H. fuscus* in Parambikulam Tiger Reserve and Eravikulam National Park. All sites lie in the state of Kerala, in which there is apparently only one previously published record of each species. The Brown Mongoose records expand its reported altitudinal range to 492–2,032 m.

Keywords: Anamalai Hills, camera-trapping, Chinnar Wildlife Sanctuary, Eravikulam National Park, Herpestidae, Parambikulam Tiger Reserve

ചുണ്ണയൻ കീരിയുടെയും തവിടൻ കീരിയുടെയും കേരളത്തിൽ നിന്നുമുള്ള പുതിയ ചില റിപ്പോർട്ടുകൾ

സംഗ്രഹം

പറമ്പിക്കുളം കടുവാസങ്കേതം, ചിന്നാർ വന്യജീവി സങ്കേതം, ഉരവികുളം ദേശീയോദ്യാനം എന്നിവിടങ്ങളിൽ 2011-12കളിൽ നടത്തിയ പഠനങ്ങളിൽ ചുണ്ണയൻകീരിയെ (Ruddy Mongoose) ചിന്നാറിൽ നിന്നും, പറമ്പിക്കുളത്തു നിന്നും നിരീക്ഷണ ക്യാമറ ഉപയോഗിച്ച് കണ്ടെത്തുകയുണ്ടായി. കൂടാതെ തവിടൻ കീരിയെ (Brown Mongoose) പറമ്പിക്കുളത്തു നേരിൽ കാണുകയും ഉരവികുളത്തു നിന്ന് നിരീക്ഷണ ക്യാമറയിൽ ചിത്രമെടുക്കുകയും ചെയ്തു.

Introduction

India has seven species of mongoose, all in the subfamily Herpestinae of family Herpestidae. Four are known from Kerala, one of India's southernmost states: Indian (Common) Grey Mongoose *H. edwardsii*, Brown Mongoose *H. fuscus*, Ruddy Mongoose *H. smithii* and Stripe-necked Mongoose *H. vitticollis* (Nameer 2000, Menon 2003). Of these four, Indian Grey Mongoose is the most widespread, seen near human habitation and along forest edges, as well as in the forest interior (e.g. Shekhar 2003, D. Mudappa *in litt.* 2013). While Stripe-necked Mongoose is seen in most forested areas of the Western Ghats (Mudappa 2013), Brown Mongoose and Ruddy Mongoose have more restricted reported distributions, with apparently only a single published record of each species from the State (see below). Recent (2011–2012) small carnivore surveys in various protected areas in the Anamalai region (Fig. 1) of the Western Ghats recorded all four species: the records of Brown and Ruddy Mongooses are presented here (detailed in Table 1). Locations and altitudes were recorded using a Garmin 72 GPS receiver. The former used the WGS84 datum, and the latter are approximate.

Ruddy Mongoose

Ruddy Mongoose is distributed in peninsular India, from the state of Rajasthan in the west to Bihar to the east, and in Sri Lanka (Phillips 1984, Dookia 2013, Mudappa 2013). In Parambikulam Tiger Reserve, a duo of Ruddy Mongooses was photographed by a Bushnell Infrared camera-trap (Trophy^{CAM} STC-TGI4M) installed near a stream running through a moist deciduous forest, and one was sighted near the tunnel entry of the Parambikulam reservoir (Table 1). In Chinnar Wildlife Sanctuary, three independent camera-trap images of Ruddy Mongoose were obtained from a scrub jungle near the Kootar region (Table 1, Fig. 2). Ruddy Mongoose looks similar to Indian Grey Mongoose, but can be distinguished by a brown pelage with a rufous tinge, darker feet and black tip to the tail, which is usually curved upwards (Mudappa 2013). All five records of Ruddy Mongoose were within altitudes recorded as 440 to 575 m. All records were by day, consistent with previous reports that the species is largely diurnal. The single previously published report of Ruddy Mongoose from Kerala (Pillay 2009) is from Chinnar Wildlife Sanctuary.

Table 1. The survey's records of Ruddy Mongoose *Herpestes smithii* and Brown Mongoose *H. fuscus*, Kerala, India.

Date	Location	Time	Record	Alt. (m)	Forest type
Ruddy Mongoose					
4 Jan 2012	Tunnel Entry, Parambikulam TR, 10°24'58.0"N, 76°47'52.8"E	15h20	Direct sighting	541	mdf
13 Mar 2012	Vengoli, Parambikulam TR, 10°24'22.5"N, 76°47'56.1"E	10h26	Camera-trapped	574	mdf
30 Sep 2012	Kootar, Chinnar WLS, 10°21'05.4"N, 77°13'42.6"E	07h15	Camera-trapped	442	Scrub jungle
3 Oct 2012	Kootar, Chinnar WLS, 10°21'01.6"N, 77°14'11.8"E	13h48	Camera-trapped	439	Scrub jungle
5 Oct 2012	Kootar, Chinnar WLS, 10°21'05.4"N, 77°13'42.6"E	06h53	Camera-trapped	442	Scrub jungle
Brown Mongoose					
21 Sep 2011	Orukomban, Parambikulam TR, 10°24'0.2"N, 76°41'38.2"E	07h50	Direct sighting	492	Evergreen forest
9 Dec 2012	Eravikulam NP, 10°13'24.3"N, 77°04'59.7"E	21h27	Camera-trapped	2,032	Shola*

*montane evergreen forest; mdf = moist deciduous forest

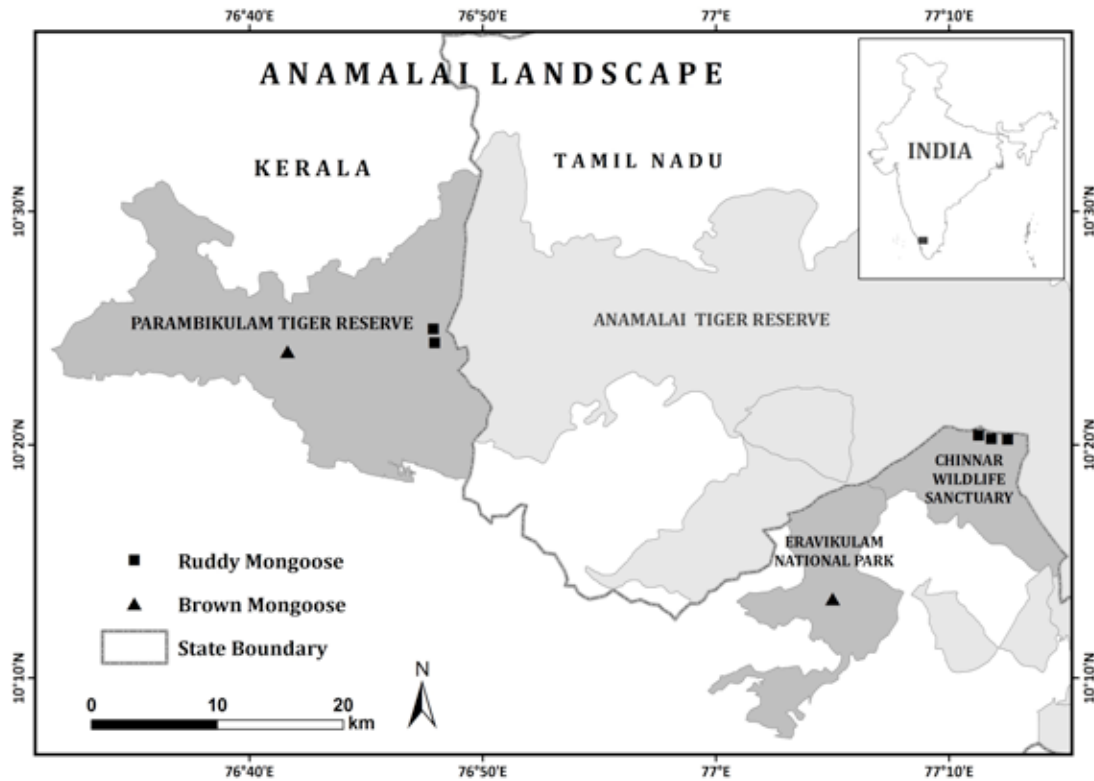


Fig. 1. Locations of the survey's Ruddy Mongoose *Herpestes smithii* and Brown Mongoose *H. fuscus* records in the Anamalai landscape, southern Western Ghats, India.



Fig. 2. Camera-trapped Ruddy Mongoose *Herpestes smithii* from Chinnar Wildlife Sanctuary, Kerala, India, 3 October 2012.



Fig. 3. Camera-trapped Brown Mongoose *Herpestes fuscus* from Eravikulam National Park, Kerala, India, 9 December 2012.

Brown Mongoose

Brown Mongoose inhabits forests in the south Indian hill ranges at 700–1,850 m asl (Mudappa *et al.* 2008, Mudappa 2013) and in Sri Lanka (Phillips 1984). Apparently the only previous record from Kerala is from Peeramedu, Idukki district (Mudappa *et al.* 2008). A Brown Mongoose was sighted in Parambikulam Tiger Reserve, on a forest road; it disappeared as soon as it was sighted (Table 1). A Brown Mongoose camera-trapped near the Eravikulam Hut, Eravikulam National Park, was on a *Rhododendron arboreum* tree, hardly one meter from the ground level (Table 1, Fig. 3). The species is clearly identifiable by its mostly uniform dark coloration and thick,

conical tail. These records extend the known altitudinal limit of Brown Mongoose in the Western Ghats. The sighting in Parambikulam Tiger Reserve, at a recorded altitude of 492 m, is about 200 m lower than the lowest elevation given in Mudappa *et al.* (2008), while the Eravikulam National Park record, at 2,032 m, is about 200 m higher than the highest elevation given by Mudappa (2013).

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References

- Dookia, S. 2013. Recent sightings of Ruddy Mongoose *Herpestes smithii* in Eserna hill range, Jalore, Rajasthan, India: northwest extension of its known range. *Small Carnivore Conservation* 49: 25–27.
- Menon, V. 2003. *A field guide to Indian mammals*. Doring Kindersley/Penguin, New Delhi, India.
- Mudappa, D. 2013. Herpestids, viverrids and mustelids. Pp. 471–498 in Johnsingh, A. J. T. & Manjrekar, N. (eds) *Mammals of South Asia*, 1. Universities Press, Hyderabad, India.
- Mudappa, D., Choudhury, A., Wozencraft, C. & Yonzon, P. 2008. *Herpestes fuscus*. In: IUCN 2012. *IUCN Red List of Threatened Species*. Version 2012.2. <www.iucnredlist.org>. Downloaded on 9 March 2013.
- Nameer, P. O. 2000. *Checklist of Indian mammals*. Kerala Forest Department and Kerala Agricultural University, Trivandrum, Kerala, India.
- Phillips, W. W. A. 1984. *Manual of the mammals of Sri Lanka*, 2nd edn, III. Wildlife and Nature Protection Society of Sri Lanka, Colombo, Sri Lanka.
- Pillay, R. 2009. Observation of small carnivores in the southern Western Ghats, India. *Small Carnivore Conservation* 40: 36–40.
- Shekhar, S. K. 2003. The status of mongooses in central India. *Small Carnivore Conservation* 29: 22–23.

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