

A daytime observation of a Spotted Linsang *Prionodon pardicolor* in Namdapha Tiger Reserve, Arunachal Pradesh, India

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Abstract

A Spotted Linsang *Prionodon pardicolor* was sighted and photographed at an elevation of 533 m asl along the Namdapha River in Namdapha Tiger Reserve, Arunachal Pradesh, India. This is the first verifiable record of the species utilising an open space along riverine habitat for diurnal resting.

Keywords: Prionodontidae, diurnal resting, riverine habitat, ticks

On 31 October 2021, at 06h30, while conducting field surveys to monitor White-bellied Heron *Ardea insignis* along the Namdapha River, in Namdapha Tiger Reserve (NTR), Arunachal Pradesh, India (27°33'45"N, 96°33'07"E; WGS 84; 533 m asl; Fig. 1), we observed through binoculars a small, round object on a large boulder (height *c.* 1 m above the water surface), about 6 m from the nearest shore and 70 m from the point of observation. On closer inspection, it was found to be a small mammal that was resting in a crouched position (Fig. 2a). We photographed it but could not identify the mammal immediately as it was resting with its head down

and facing away from us, with little movement, for the duration of our *c.* 30-minute observation.

After completing the day's survey of herons, we returned along the same trail towards our base camp, which was set up about 300 m from where we had observed the mammal. As we reached the location, at about 15h00, we photographed two Asian Small-clawed Otters *Aonyx cinereus* fishing in the fast-flowing river. As the otters moved downstream, we readjusted the direction of our binoculars in hope of seeing the previously unidentified mammal. It was still resting, tightly curled up, in the same place it had been that morning, 8 hours earlier (Fig. 2b).

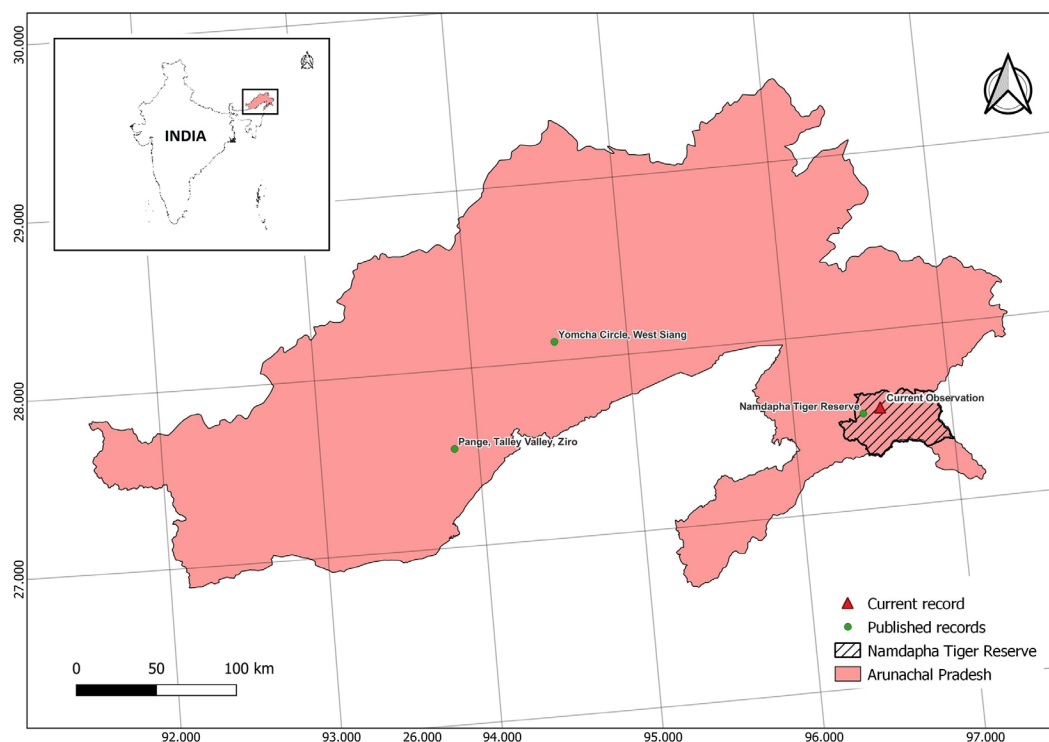


Fig. 1. Map showing the current observation location of Spotted Linsang *Prionodon pardicolor* in Namdapha Tiger Reserve, along with previously published records of the species from across Arunachal Pradesh, India. Locations taken from Lyngdoh et al. (2011), Mahar & Kaul (2012), Naniwadekar et al. (2013).

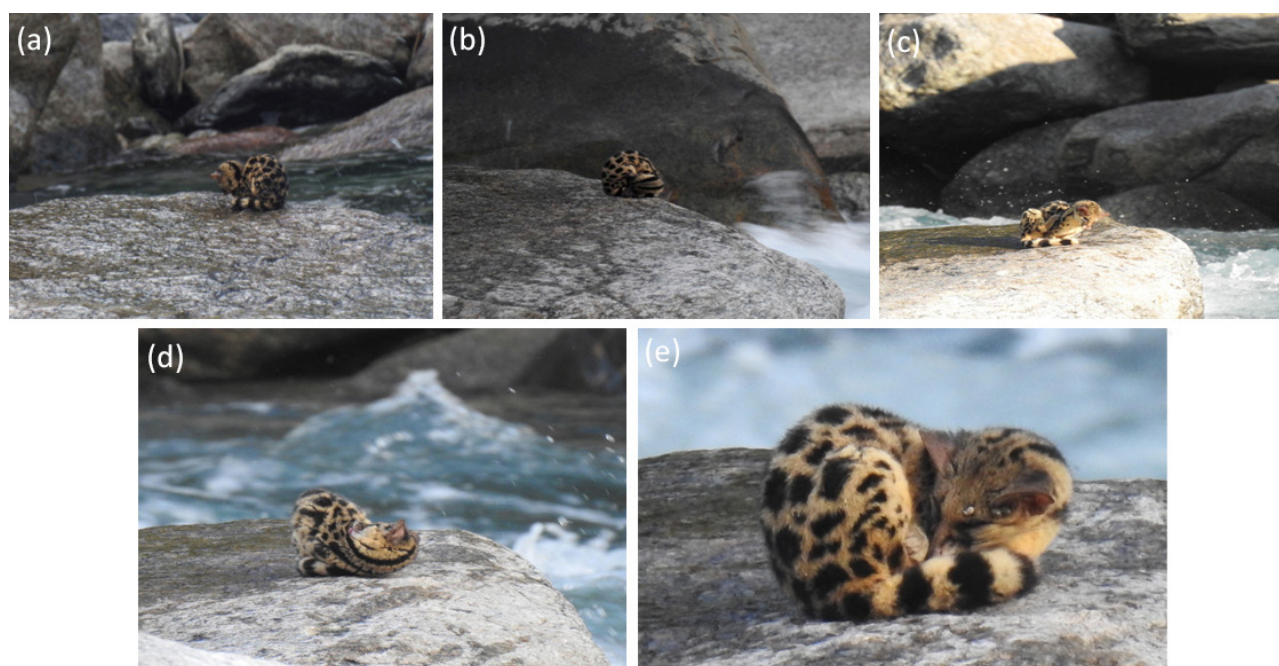


Fig. 2. (a) The Spotted Linsang *Prionodon pardicolor* was observed in a crouched position on a large boulder in River Namdapha, Namdapha Tiger Reserve, India, when first sighted on 31 October 2022. (b) Presumably the same linsang was seen again, in the same place, about 8 hours later. (c), (d) The animal uncurling and groomed itself in the evening. (e) Three ticks were embedded above its left eye. (Photos: Yumlam Benjamin Bida.)

After about 35 minutes, at 15h45, as the sun began its descent, the mammal started showing some activity. For the first time since we had first spotted the animal that morning, it uncurling itself (Fig. 2c, d), groomed itself and briefly stood on all fours to shift position before lying down again, as can be seen in a video taken at a distance of c. 40 m (<https://doi.org/10.6084/m9.figshare.20055470.v1>).

On the basis of photographs, the small mammal was subsequently identified as the Spotted Linsang *Prionodon pardicolor*. Ticks were lodged on its head (Fig. 2e). After c. 2 minutes of uncurling, it started licking itself in an act of self-grooming. This carried on for another 2 hours, until it was completely dark.



Fig. 3. The habitat and the river where the Spotted Linsang *Prionodon pardicolor* (circled) was sighted in Namdapha Tiger Reserve, India. (Photo: Yumlam Benjamin Bida.)

We continued to observe the Spotted Linsang with the aid of flashlights until it finally stood up, jumped into the river, swam across to the nearest shore, and later moved towards the forest. (It was too dark to photograph this.) The vegetation of the forest into which the Spotted Linsang proceeded towards is dominated by *Bambusa*, *Calamus* and trees like *Canarium strictum* and *Dipterocarpus* (Fig. 3).

NTR harbours at least 13 out of the 20 species of small carnivores reported in Arunachal Pradesh (Naniwadekar et al. 2013). In NTR, the Spotted Linsang was first documented by camera-trap in 2012 and a direct observation was reported the following year (Sarma 2012; Naniwadekar et al. 2013; Fig. 1). In India, the Spotted Linsang has been reported recently in Sikkim (Ghose et al. 2012), Assam (Borah 2010), Meghalaya (Khatonier & Lyngdoh 2021), Mizoram (Mizo-Envis 2008), Manipur (Ramakanth 1994), Nagaland (Choudhury 2002) and elsewhere in Arunachal Pradesh (Lyngdoh et al. 2011, Mahar & Kaur 2012). Most of these reports are based on opportunistic records, camera-traps or indirect evidence; no study has focused on this elusive species. In NTR, the difficult terrain is a major challenge that limits the extent of survey and research areas. In addition, human encroachment and illegal hunting in the NTR have been matters of concern for the conservation of small carnivores, as Datta et al. (2008) have highlighted.

To our knowledge, the current report presents the first photographic evidence of Spotted Linsang utilising riverine habitat for resting during the day.



Previous records from riverine forest (e.g. Sunquist 1981, Van Rompaey 1995, Johnson et al. 2009, Menon 2014) do not involve animals at rest by day. Indeed, we have traced no other field observation of the species at rest by day, in any habitat. The species is nocturnal (e.g. Van Rompaey 1995) and there are few observations of any tropical Asian species of nocturnal small carnivore at rest by day in the wild. This is presumably because they usually rest in cover, such as holes or dense vegetation. The current observation is a rare sample of an undisturbed individual Spotted Linsang behaving 'naturally' in the wild, by day. It is therefore not yet possible to tell whether this resting site is typical of the species or aberrant. Future studies and close monitoring in the wild may provide insights into this behaviour.

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