

# Records of Spotted Linsang *Prionodon pardicolor* from Thap Lan and Pang Sida National Parks, Thailand

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## Abstract

Spotted Linsang *Prionodon pardicolor* was recorded twice in Thap Lan National Park, Thailand, in 2008 and twice in Pang Sida National Park, Thailand, in 2011. These records represent a significant south-eastern extension of known range in Thailand, but are consistent with the species's recent discovery in the Cardamom mountains of Cambodia.

*Keywords:* Cardamom mountains, distribution, range extension, poaching

บันทึกการพบ ชะมดแปดลายจุด *Prionodon pardicolor* จากอุทยานแห่งชาติทับลาน และอุทยานแห่งชาติปางสีดา ประเทศไทย

บทคัดย่อ

ในประเทศไทยมีการบันทึกว่า พบชะมดแปดลายจุด สองครั้งในอุทยานแห่งชาติทับลาน เมื่อปีพ.ศ. 2551 และในอุทยานแห่งชาติปางสีดา เมื่อปีพ.ศ. 2554 ซึ่งจากหลักฐานการพบเหล่านี้แสดงให้เห็นว่า ในประเทศไทย สัตว์ชนิดนี้มีขอบเขตถิ่นอาศัยขยายเพิ่มจากเดิมลงมาด้านตะวันออกเฉียงใต้ได้อย่างมีนัยสำคัญ แต่ทั้งนี้ก็มีความสอดคล้องกับการค้นพบสัตว์ชนิดนี้ในบริเวณ เขอกเขากระวาน ในประเทศกัมพูชา

คำสำคัญ: การแพร่กระจาย, การเพิ่มขยายจากถิ่นอาศัยเดิม, ถิ่นที่อยู่อาศัย, การล่า

There are few published records of Spotted Linsang *Prionodon pardicolor* from Thailand, reflecting a statement in the IUCN/SSC action plan for mustelids and viverrids (Schreiber *et al.* 1989: 9) that “the Spotted Linsang is one of several tropical species which, in spite of a large range, remains virtually unknown and could disappear without anybody noticing”. From across its range (the eastern Himalayas, southern China and northeast India: Corbet & Hill 1992) there are relatively few historical specimens, leading to a wide perception that it is rare, including by Lekagul & McNeely (1977) for Thailand. Recent surveys in parts of its range, such as southern China (Lau *et al.* 2010), suggest that the paucity of records more reflects difficulty of finding the species rather than genuine rarity, and the species is currently listed on the *IUCN Red List of Threatened Species* (IUCN 2010) as Least Concern. However, further records are required to allow more informed judgement.

This note documents two records of Spotted Linsang from Thap Lan National Park (NP) and two more from Pang Sida NP, gathered during general wildlife survey in the protected areas with a focus on reducing illegal hunting and wildlife trade. The first record came from a Camtrakker camera-trap film photograph collected in Thap Lan NP, located in moist evergreen forest at 14°16'18.18"N, 102°16'01.41"E, recorded altitude (from GPS) 561 m, on 15 April 2008 at 22h20 (Fig. 1; the development of

film resulted in over-prominence of orange tones). This is the only such record in two years of continuous camera-trapping (8,475 camera-trap-nights) in the park. Ongoing carnivore monitoring surveys are implemented across Thap Lan NP in collaboration with park management, to assess carnivore distribution in each



Fig. 1. Spotted Linsang *Prionodon pardicolor* camera-trapped in Thap Lan National Park, Thailand, on 15 April 2008.

management zone. To gain a broad overview, cameras are checked and moved on a 30-day cycle and placed along transects with a minimum separation of 1 km. During the session the Spotted Linsang was recorded, no bait was used with the camera-traps.

Subsequently, the remains of a Spotted Linsang were confiscated on 28 May 2008 at 14°12'15.17"N, 102°12'35.73"E. Its tail had been removed, but retained, prior to the remainder of its body being semi-smoked to preserve it for later personal consumption. The five suspects were apprehended in the forest in possession of the poached wildlife and weapons. Spotlighting and using homemade muzzle-loading guns is local poachers' preferred method of hunting, except when longer forays are made, such as during aloeswood/agarwood *Aquilaria crassana* collection, when small snares are set for galliforms such as Red Junglefowl *Gallus gallus*. Other wildlife in this same haul included two medium-sized civets—perhaps Large Indian Civets *Viverra zibetha*, because these have been recorded in camera-traps in the area—skinned and smoked, one juvenile Pileated Gibbon *Hylobates pileatus*, and two Water Monitors *Varanus salvator*, all confiscated (Fig. 2). This poached Spotted Linsang can safely be assumed to come from the same area as the arrest site (Lam Praeng, in management zone 3), just 9 km from where the camera-trap photo was taken.

The two records from Pang Sida NP came from the same camera location, the first on 10 February 2011 at 05h30 and the second on 20 February 2011 at 20h08 (Fig. 3), using a 5 megapixel Moultrie™ Game Spy D50 digital camera-trap set on a well-used animal trail and with no bait or lure. The evergreen forest in this location (14°07'20.7"N, 102°15'18.7"E) at altitude (from GPS) 564 m is approximately 16 km directly south of, and contiguous with, the sites where Spotted Linsang was recorded in Thap Lan NP. The area falls under the responsibility of Pang Sida NP's Huay Nam Yen sub-station.

It seems that these two Pang Sida records represent one individual: the animal's pelage in each photograph shows similar patterning. These two records are the product of just two months' camera-trapping (1,607 overall camera-trap-nights with 72 at this one location) in Pang Sida NP.

The only previous Thai records published or in interna-

tional collections seem to be: one at the United States National Museum of Natural History, Washington DC, U.S.A. (NMNH 308234) from Khar village #9, Ban Muang, Loei province, collected in August 1958; one at the Thailand Institute of Scientific and Technological Research, Bangkok, lacking collection locality or date but acquired in 1973; and a field sighting of one around the headquarters of Doi Inthanon NP, Chiang Mai province (about 18°32'N, 98°32'E) on 8 December 1995 (Tizard 2002). In addition, Nabhitabhata & Chan-ard (2005) reported presence, without details of the records, in Lum Nam Pi (Mae Hong Son province) and Phu Ka (Nan province).

These records from Thap Lan NP therefore represent a considerable southerly extension of range for the species within Thailand, that from Loei province (about 17°N, depending on where the precise site lies) being the southernmost previous Thai record. Presence in Thap Lan NP does, however, accord with the two records (both recent) from the Cardamom mountains of Cambodia: in possession of a hunter in semi-evergreen forest (thus, altitude of capture not known), and in primary evergreen forest at 1,200 m (Kong & Tan 2002, Holden & Neang 2009). These come from even further to the south-east, globally, than lie these two Thai national parks.

Just west of Thap Lan NP lies Khao Yai NP, which has supported among the highest levels of both formal survey and leisure wildlife-watching of any South-east Asian site without, apparently, finding the species. In Khao Yai NP, high levels of camera-trapping spread over many years and various sites have been conducted (Austin & Tewes 1999, Lynam *et al.* 2006, Suzuki *et al.* 2006; and 6,253 camera-trap-nights during October 2003 – March 2007; K. Jenks *in litt.* 2010). Much of this was, however, aimed at larger carnivores, specifically Tiger *Panthera tigris* and Clouded Leopard *Neofelis nebulosa*, and the extent to which linsangs might best be detected with different specific methodology is unknown. The moist evergreen forest in which the Thap Lan NP and Pang Sida NP animals were camera-trapped is better represented as a habitat in Khao Yai NP, and there seems no obvious reason why Spotted Linsang would not also inhabit Khao Yai NP. Whether the lack of records from Khao Yai NP reflects genuine scarcity or absence, or that optimal techniques have not yet been used intensively enough there, is difficult to tell. Similarly, the



Fig. 2. Poached Spotted Linsang *Prionodon pardicolor*, and other wildlife, photographed in Thap Lan National Park, Thailand, on 28 May 2008.



Fig. 3. Spotted Linsang *Prionodon pardicolor* camera-trapped in Pang Sida National Park, Thailand, on 20 February 2011.

species's true conservation status in Thailand remains to be clarified.

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