

## ORIGINAL ARTICLE

# First record of Stripe-backed Weasel *Mustela strigidorsa* in Cambodia

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## Abstract.

A Stripe-backed Weasel *Mustela strigidorsa* camera-trapped in the far north-east of the Cambodia in Virachey National Park is the first record from the country. Identification of the species was enabled by the narrow, white-silver dorsal streak going down the spine which appears clearly in the two camera trap images. Stripe-backed weasel is not often camera-trapped or observed in its range.

*Keywords:* Stripe-backed Weasel, Virachey National Park, Cambodia, camera-trapping.

Virachey National Park (Virachey NP) is located in the extreme north-east of Cambodia and borders forested regions of Lao PDR and Vietnam. It encompasses 3,325 km<sup>2</sup> of evergreen forest, upland savannah, secondary forest, and bamboo forest. Part of Virachey NP's boundary is the international border with Lao PDR, a mostly undemarcated area of mountains reaching up to 1,500 meters asl (above sea level). Numerous small streams flow south out of the Virachey NP-Lao PDR border mountains and eventually reach the Sesan River which flows west to meet the Mekong River. Along one of these streams, the O (O= river) Gan-Yu, a camera-trap photographed two images of a Stripe-backed Weasel *Mustela strigidorsa*. Identification of the species was based on the whitish dorsal stripe clearly visible in the photograph that begins near the back of the head and continues in a straight line along the animal's spine terminating at the base of the tail (Figures 1 and 2). Confirmation of the species was made with the help small carnivore specialists and this record represents the first record of Stripe-backed Weasel in Cambodia.

The images (one 'trigger event') came during a 3-year camera-trapping survey in Virachey NP carried about by Habitat ID and Virachey NP staff that was targeted at larger mammals such as Tiger *Panthera tigris*, Asian Elephant *Elephas maximus* and Gaur *Bos gaurus*. The camera-trap station was at 910 meters asl and at 14°20'42.11" N, 106°58'56.24" E (measured using Garmin eTrex GPS), near the base of Phnom (phnom = mountain) Haling close to the border of Lao PDR in the rocky streambed of the O Gan Yu in relatively undisturbed evergreen forest on 14 February 2015 at 08h36. This stream usually contains several small pools of water even in the dry season, and many animals

come to this location to drink and presumably forage among the steep banks and large boulders. Our guides frequently collected small river crabs for our group's consumption in this stretch of the O Gan Yu. This camera station has also recorded other small carnivores such as Common Palm Civet *Paradoxurus hermaphroditus*, Large Indian Civet *Viverra zibetha*, Binturong *Arctictis binturong*, Asian Small-clawed Otter *Aonyx cinereus* and Yellow-throated Marten *Martes flavigula* (McCann & Pawlowski 2017).



**Figure 1.** The Stripe-backed Weasel *Mustela strigidorsa* near the bottom left of the camera-trap photograph. The white dorsal stripe is visible in this image. Virachey National Park, 14 February 2015.

Furthermore, a weasel unidentifiable at the species-level but belonging to either Yellow-bellied Weasel *Mustela kathiah* or Striped-backed Weasel was camera trapped on the top of nearby Phnom Haling at (1,420 m asl) on 15 January 2016 at 18h54 (McCann & Pawlowski 2017). The distance between the camera station atop Phnom Haling and the camera station on the O Gan Yu where Stipe-backed Weasel was camera-trapped is 510 meters in elevation and approximately one kilometre in distance. Yellow-bellied Weasel was camera trapped for the first time in Cambodia in the southwestern region of the country known as the Cardamom Mountains and that record found the animal far outside its known range (Phan et al. 2014).





**Figure 2.** Enlarged insert of the camera-trapped Stripe-backed Weasel *Mustela strigidorsa*. The white dorsal stripe is clearly visible. Virachey National Park, 14 February 2015.

Stripe-backed Weasel is only rather rarely encountered in the wild directly or photographed in camera traps (Abramov *et al.* 2008). It is likely that the species is overlooked and not genuinely rare (e.g. Abramov *et al.* 2008 Chutipong *et al.* 2014). Virachey NP is some distance from other known records of Stripe-backed Weasel. The nearest record comes from Vietnam in 1976 in Binh Tri Thien Province (17°05' N, 106°43' E); the next closest record comes from Lao PDR at the border of Khammouan-Savannkhet province (17°03'32" N, 106°07'42" E) at an altitude of approximately 260 m at 13h25 on 20 November 2008, where a lone Stripe-back Weasel was seen near the bottom of a cliff (Streicher *et al.* 2010). Both locations are in the Annamite Mountains, and Virachey NP is also located in the Annamite Mountains over two hundred kilometres to the south. However, as Streicher *et al.* (2010) noted “the true southerly limits remain unclear” for Stripe-backed Weasel. The Virachey NP record in this paper marks a new southerly extension in Indochina (Cambodia, Laos, and Vietnam) for Stripe-backed Weasel, yet a more southerly record was found in the Tenasserim Mountains on the Thai-Myanmar border near Kuiburi NP (Chutipong *et al.* 2014).

This record of Stripe-backed Weasel was initially overlooked when reviewing the images. Numerous squirrels (Sciuridae), mice (Muridae) and birds were recorded hopping

around the boulders in the camera-trap's frame, resulting in an excess of 2000 similar photographs. This explains why the record of Stripe-backed Weasel did not appear in McCann & Pawlowski (2017). The later detection of the Stripe-backed Weasel resulted from a more careful examination of this camera station's photographs focusing on possible mongoose *Herpestes* records, which were not recorded in McCann & Pawlowski (2017). While searching for a mongoose records, the Stripe-backed Weasel images were discovered.

This camera-trap station uncovered other species such as Asian elephant and Asian Small-clawed Otter which are apparently not often encountered in Virachey NP anymore or indeed anywhere else in Ratanakiri or Stung Treng provinces (Pawlowski & McCann 2017, McCann & Pawlowski 2017). In spite of the rich biodiversity of the region and Virachey NP, a 'border belt road' currently under construction threatens the site from where these records come from (McCann 2017).

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