

## Short Note

# Further Records of Stripe-backed Weasel *Mustela strigidorsa* from Lao PDR

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The Stripe-backed Weasel (= Back-striped Weasel) *Mustela strigidorsa* Gray, 1853 of the eastern Himalayas, southern China and northern South-east Asia has conventionally been considered a rarity<sup>1,2</sup>, but a recent review concluded that it is quite possible that "the species is neither particularly rare nor preferentially threatened, rather that it is an inconspicuous denizen of chronically under-surveyed regions" (<sup>3</sup>). Because these conclusions was based on only *c.*80 dead animals (not all preserved), 22 sightings or camera-trap photographs of wild animals, and a number of vague reports, the same authors concluded with "all [further] records, even single incidental ones, merit publication". This short note presents three further records from Lao PDR, including apparently the first biometrics of a living individual from anywhere in the species's world range.

### FIELD OBSERVATIONS

On 7 April 2008, a single Stripe-backed Weasel was seen at the foot of the north side of the Phou Vang massif in the Nakai–Nam

Theun NPA, Khammouan province, at about 17°48'N, 105°32'E (800 m asl) at 06h45. It ran across rocks in a stream (the Houay Nameuy) within evergreen forest into adjacent vegetation, then reappeared on the stream boulders with a rat in its mouth. It was observed through binoculars momentarily at *c.*30–40 m, and seen to be an obvious weasel. The visible parts (which did not include the venter) were all reddish-brown, except for thin pale stripe down the dorsum, and it had quite a bushy tail for a weasel. The pelage tone was far redder than typical field guide<sup>4,5</sup> illustrations indicate, but matched the animal in the photograph on the cover of *Small Carnivore Conservation* 26 (accompanying<sup>6</sup>). The villager with WGR called the weasel *chonfon*, and said the species was (in translation) "very stinky, and inedible".

During the flooding of the Nakai plateau for the Nam Theun 2 Hydropower Project, the Nam Theun Power Company conducted a wildlife rescue programme. This included capture of mammals marooned on newly formed islands, using various means such as cage traps. On 11 October 2008 at 11h26 a

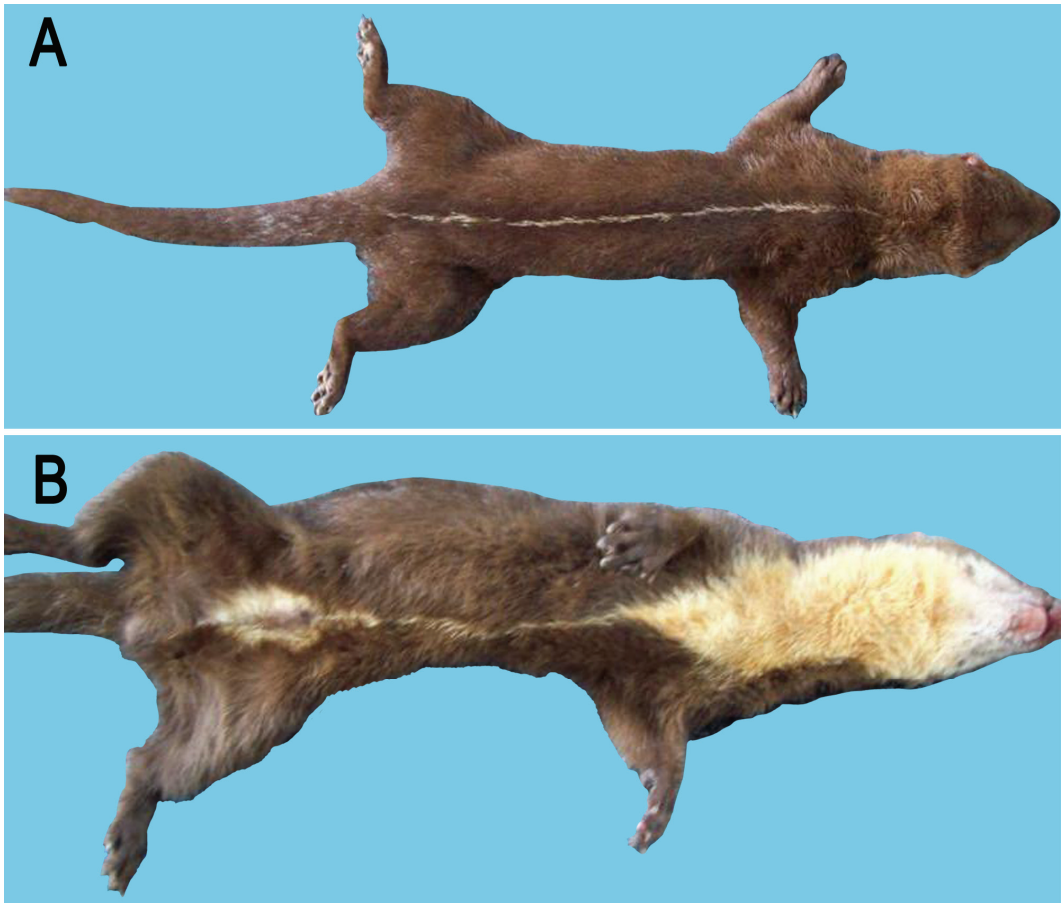


FIGURE 1. Stripe-backed Weasel *Mustela strigidorsa*, Nakai plateau. A: dorsal view and B: ventral view.

Stripe-backed Weasel was found in one such trap that had been baited the day before with dead chicken. The trap was set at 17° 51' 59" N, 104° 59' 45" E (about 534 m) on an island comprising mainly grassland, with some patches of shrub and bamboo and only a few larger trees. The animal had scent-marked multiple times and a very strong odour was noticeable at 10 m range. The weasel was notably less aggressive than the more often captured Small Asian Mongoose *Herpestes javanicus* É. Geoffroy Saint-Hilaire, 1818. It was taken to the wildlife rescue station in Ban (= village of) Thalang for a comprehensive health check, where it was anaesthetised using the Field Gas

Anaesthesia Kit developed by the International Zoo Veterinary Group with Isoflurane in an induction chamber consisting of a 1.5-liter plastic water bottle. The time from application to surgical anaesthesia was two minutes, with values as in Table 1. Two minutes after anaesthetic application was stopped, the animal appeared completely recovered. The animal (Fig. 1) was dark chocolate-brown with a regular narrow white dorsal stripe from the neck to the base of the tail. It showed a large yellow to creamy-white patch from the lower jaw over the throat, where it narrowed to a thin stripe which extended along the midline of the chest and abdomen and ended

TABLE 1. Anaesthetic values for the Stripe-backed Weasel captured on the Nakai plateau.

Time	Heart rate / beats per minute	Respiration rate / breaths per minute	<sup>a</sup> SpO <sub>2</sub> / %	Temperature / °C
15h13	310	24	88	40.0
15h23	276	28	73	39.6

<sup>a</sup>Partial Oxygen Saturation.

between the hind legs. The ears were nearly hidden in the fur and positioned very much to the side of the head and the eyes were black. It was a fully mature male in excellent condition, estimated (based on dentition) to be at least four years old. It had a head-body-length of 340 mm, a tail of 200 mm and a bodyweight of 600 g. It was released in an area with a habitat structure similar to the island of origin (at 17°50'02" N, 105°08'01" E) at 17h20 the same day.

A single Stripe-backed Weasel was observed at the base of Pha (= cliff) Kat on the Khammouan–Savannkhet province border at about 17° 03' 32" N, 106° 07' 42" E (altitude *c.*260 m) at 13h25 on 20 November 2008. It was watched for a minute or two at a range of 10–20 m as it ambled on a meandering route through the sparse understorey around a slow-flowing stream (at which it paused to drink) emerging from the karst; it briefly entered the cave from which the stream flowed. The animal was rich rusty brown, somewhat paler than that on the cover of *Small Carnivore Conservation* 26 (accompanying<sup>6</sup>); as it moved slowly by, the narrow silvery-white dorsal stripe was clearly visible (and seemed to be boldest over the fore-limbs) as was, at certain angles, a broad, richly coloured deep-yellow chest patch. The villager accompanying JWD, when asked its name just after the sighting, called the animal *chonfon*, and said it was common and came to the village to take chickens. When specifically asked, he

said that it was normal for *chonfon* to show a pale back stripe.

## DISCUSSION

The history of records in Lao PDR is typical of this weasel across its range. There was only one historical record, in 1929<sup>7</sup>, but since the first modern record, in 1994<sup>8</sup>, four further field sightings, one camera-tap photograph and a village-supplied carcass are known from Lao PDR<sup>3</sup>. This is despite relatively modest levels of survey, and led to the conclusion that there were records from "most of the big forest blocks which have sustained more than a week's field survey". These additional records further support the suspicion of a relatively wide distribution in Lao PDR. The 2008 review<sup>3</sup> stated that "there has been too little [survey] in the Annamites south of the Nam Theun basin to determine whether the species does not occur in them or is awaiting discovery" and while the Pha Kat sighting is *c.*70 km south of the previously southernmost Lao locality (the Nakai plateau<sup>9</sup>), the true southerly limit remains unclear. It is known from almost as far south in Vietnam (17° 05' N, in Le Thuy district, Quang Binh province<sup>10</sup>), and west of the Mekong there are records south to 16° 00' N (Mae Wong National Park, Thailand<sup>11</sup>).

Although Stripe-backed Weasel has often been stated to be a montane or higher hill species, the Pha Kat record is one of a number from low altitudes, mostly from near rugged terrain, including other karst areas, e.g. Cuc Phuong National Park,

Vietnam<sup>3</sup>. The number of records from beside streams<sup>6, 12-14</sup>, as well as both the direct sightings presented here) might merely reflect the propensity of wildlife surveyors to concentrate observations in such areas, as much as any habitat selection by this weasel.

The measurements of the Nakai individual are the first taken on a live animal. Weight is similar to the 700 g estimated for an animal trapped in Thailand<sup>6</sup>, but this was estimated (by eye) to be only 250 mm total length. The origin of an assessment of this species's weight as 1–2 kg<sup>1</sup> is unclear; that the mature male individual in Nakai weighed only 600 g makes the occurrence of such heavy individuals in the wild unlikely, unless there is extraordinary geographic variation. The only previous photographs of living animals traced are that of the trapped animal from Phu Khieo Wildlife Sanctuary, Thailand<sup>6</sup>, a field photograph (cover of *Small Carnivore Conservation* 26, accompanying<sup>6</sup>) from there, and two camera-trap pictures: from northern Lao PDR<sup>15</sup> and, unpublished, from Vietnam<sup>3</sup>.

Chicken-stealing has been attributed to this weasel before, in far-northern Myanmar<sup>16</sup>, where species identity was validated by the examination of skins of animals killed in the act, and in far-northern Vietnam<sup>17</sup>. These latter observed a Stripe-backed Weasel on 7 March 2008, at 10h20, as it ate a bird on the ground in Mi Lang forest (21° 40' 53" N, 104° 07' 08" E, 1400–1900 m altitude), Che Tao commune, Mu Cang Chai district, Yen Bai province. As with these Lao records, in Mu Cang Chai according to local people this species is not very rare and its meat is too smelly to be eaten.

The name *chonfon* is often taken by both Lao and foreign wildlife and conservation

personnel to refer to mongooses *Herpestes*, or even specifically to the Small Asian Mongoose. Its use by two villagers from different regions, with the avowal of one that a pale back-stripe is standard on animals of that name that precludes his having misperceived the animal under observation (implausible anyway, given the excellent viewing conditions), proves that '*chonfon* = mongoose' is not a reliable linkage in east-central Lao PDR, and supports a recent assignment of this word's use<sup>4</sup> as the basic Lao substantive for both weasels and mongooses (although the statement in the same source that *chonfon* unaccompanied by any adjective is specific to Siberian Weasel *Mustela sibirica* Pallas, 1773 is highly misleading). This name sharing could plausibly be so throughout the Lao range of the weasel, and adds to earlier caution<sup>6</sup> over possible confusion by laypeople between Stripe-backed Weasel and mongooses.

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on the spelling of chonfon, and John Pilgrim drew our attention to Le Trong Dat and Luong Van Hao (2008).

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