# The First Records of Hairy-nosed Otter *Lutra sumatrana* from Cambodia with Notes on the National Status of Three Other Otter Species

This note documents, with photographs, what is known of the current status of otters in Cambodia. Of particular note are the first records of the little known Hairy-nosed Otter Lutra sumatrana. Four species of otter; Hairy-nosed Otter Lutra sumatrana, Eurasian Otter Lutra lutra, Smooth Otter Lutrogale perspicillata and Oriental Small-clawed Otter Aonyx cinerea have been mapped by both LEKAGUL & MCNEELY (1977) and CORBET & HILL (1992) as occurring in Cambodia. However, a search of the world's major museum collections has thus far yielded only one relevant specimen of L. perspicillata with vague locality data (Geraldine Veron, in litt. to JOE WALSTON, 2002), and there appear to be no published records in the historical literature referring to any of these species from the country (e.g. DELACOUR, 1940; OSGOOD, 1932). Based on this, and the review of modern records presented below, there now appear to be only two species of otter with definite locality records from Cambodia.

## Hairy-nosed Otter Lutra sumatrana

There are no previous records of this species from Cambodia and the mapped distribution for this species from Cambodia (LEKAGUL & MCNEELY, 1977; CORBET & HILL, 1992) probably arises from two specimen records from southern and central Vietnam, both in the British Museum. One is from Long Xuyen, An Giang Province, Cochinchina in 1883, and the other is from Hue, Thua Thien Hue Province, Annam in 1927 (THOMAS, 1928). Below I document (with photographs) the first four records of *L. sumatrana* from Cambodia.

Two captive animals were photographed by Frédéric Goes in the village of Prek Toal, Battambang Province on 13 June 1998 (Fig. 1). They were reported to have been caught recently in traps along the Prek Kantiel (13° 11'N, 103° 36'E), a stream through the seasonally inundated forest and scrub of the Tonle Sap Great Lake, now the Prek Toal Core Area of the Tonle Sap Biosphere Reserve.

A young captive animal was photographed in Peam Bang village, near Boeng Chhma, on the north-eastern shore of the Tonle Sap Great Lake, Kompong Thom Province, on 5 December 1998 (Long Kheng, pers. comm., 2002) (Fig. 2), and is reproduced in DOROSHENKO *ET AL.* (1998, p. 71). This is the record misidentified in GOES & HONG CHAMNAN (2002), based on Colin Poole (pers. comm.), as *L. perspicillata*.

A mounted specimen in May 1999 was identified by the author in the museum at Phnom Tamao Zoo, near Phnom Penh (Fig. 3). Unfortunately there are no records attached to any of the specimens in this collection and it is unclear exactly how long it has been there. Staff at the zoo claimed that the animal originated from Mondulkiri Province (the late Meas Chandamony, pers. comm., 1999), but it was impossible to gain any further information or to independently verify this.

Finally, a live animal was photographed on 19 March 2000 by the author and Mike Baltzer in a wildlife market along Highway No. 4 near the village of Sre Khlong, Kompong Speu Province (Fig. 4). This animal had reportedly been recently caught locally somewhere to the west, but it was also impossible to independently verify this.

In addition LONG (2000) also mentions without details one record from an unspecified Cambodian market. The source of this was an animal seen, but not photographed, by Barney Long in Phnom Penh in January 2000. No information could be gathered as to its origin (Barney Long, *in litt.*, 2003).

There are no records of *L. sumatrana* in recent surveys of animals held in zoo collections in Cambodia (Dave Ware, pers. comm., 2000; GOES, 2000)

Little seems to be known about the habitat requirements of *L. sumatrana* (SIVASOTHI & BURHANUDDIN, 1994). However, all recent records thus far traced originate from lowland inundated forests areas in mainland Southeast Asia, peat swamp forest in peninsular Thailand (KANCHANASAKA, 2000) and Malaysia (SEBASTIAN, 1994, 1995), and Melaleuca swamp forest in southern Vietnam (NGUYEN XUAN DANG *ET AL.*, 2001).

Of the four records from Cambodia, the two with specific locality data both originate from the seasonally flooded forest and scrub of the Tonle Sap Great Lake. However, the fourth record could have originated from an area of Melaleuca swamp forest north and west of Sre Ambel, Koh Kong Province, to the west of the market where it was found. Inundated forest of these types in Cambodia is now largely restricted to the Tonle Sap Great Lake and small isolated areas in the Mekong floodplain, with the addition of some coastal areas of Melaleuca.

### Eurasian Otter Lutra lutra

Despite the range illustrated in CORBET & HILL (1992), there is as yet no record of *L. lutra* from Cambodia. However, attention should be drawn to the potential identification confusion between *L. lutra* and *L. perspicillata*.

A recent claim of *L. lutra*, from Phnom (Mount) Samkos in the Cardamom Mountains in May 2000 (DALTRY & MOMBERG, 2000, p. 208) was based on an identification from tracks following KRUUK *ET AL*. (1993) (DALTRY & MOMBERG, 2000, p. 59, and Barney Long, pers. comm. to Joe Walston, 2001). Variability in tracks within otter species makes the identification of any species by tracks alone difficult (Reuther *et al.*, 2000, pp.133–134). Furthermore, at the time of Kruuk *et al.* (1993) there was no available information on *L. sumatrana* and therefore the paper did not consider that species. Current information now suggests that tracks of *L. sumatrana* and *Lutra lutra* are probably indistinguishable, and therefore all such records, particularly in areas of possible range overlap, are best regarded as unidentified (Budsabong Kanchanasaka & Claus Reuther, pers. comm., 2002).

## Smooth Otter Lutrogale perspicillata

This is the most frequently recorded otter species in Cambodian markets or zoo collections, with data collected for a database of animals held in captivity in Cambodia showing eight records of *L. perspicillata* in two different collections (Dave Ware, *in litt.*, 2000). There is also one specimen from 1960 held in the MNHN, Paris, labelled "Indochine/Cambodge" (Geraldine Veron, *in litt.* to JOE WALSTON, 2002). OSGOOD (1932), based on





Figure 1. Captive *Lutra sumatrana*, Prek Toal (Tonle Sap Great Lake), Battambang Province, 13 June 1998. Photograph: Frédéric Goes.

Figure 2. Captive Lutra sumatrana,
Peam Bang, near Boeng
Chhma (Tonle Sap Great
Lake), Kompong Thom Province, 5 December 1998. Photograph: Long Kheng.



Figure 3. Mounted specimen of *Lutra sumatrana*, Phnom Tamao Zoo, near Phnom Penh. Origin unknown. Photograph: Colin Poole, May 1999.



Figure 4. Captive Lutra sumatrana, Sre Khlong, Kompong Speu Province, 19 March 2000. Origin unknown. Photograph: Colin Poole.



Figure 5. Single captive *Aonyx cinerea* (right) with *Lutrogale perspicillata*, Bayab Zoo, Prey Veng Province, 5 June 1999. Origin unknown. Photograph: Colin Poole.

the occurrence of the species in Laos, stated that it "appears to be the most common ofter of the Mekong".

The only documented field sighting which probably refers to this species, is a record of two animals observed during the rainy season on the O Preyhe, Koh Nhek District, Mondulkiri Province (12° 56'N, 107° 27'E) on 12 June 2000 (TIMMINS & OU RATANAK, 2001). The O Preyhe is a very small seasonally dry tributary, in the level lowlands of the Tonle Srepok, a large lowland river. The observers reported that "the tails appeared quite dorso-ventrally flattened", a characteristic of this species, and they also took track tracings for future confirmation of the identification (TIMMINS & OU RATANAK, 2001).

There are two other recent records with locality information. The first was a tame animal photographed in the town of Kratie in May 2002, and reportedly caught locally as a young animal from the Mekong River three years previously (Isabel Beasley, pers. comm., 2002). The second was an animal caught by local hunters in inundated forest scrub near Kbal Tol village south of the Prek Toal Core Area of the Tonle Sap Biosphere Reserve in mid 2002. It was subsequently sold to a local zoo in Siem Reap where it was photographed (Sun Visal & Frédéric Goes, pers. comm., 2002). This is the first proof that two species of otter coexist at one site in Cambodia .

## Oriental Small-clawed Otter Aonyx cinerea

This is the only other otter species found in recent surveys of zoo collections in Cambodia, with one found by the author and Dave Ware, held with *L. perspicillata*, in Bayab Zoo, Prey Veng Province, on 5 June 1999 (Fig. 5). In addition, MARTIN & PHIPPS (1996) reported a tail of this species for sale in a Phnom Penh market but gave no details as to how this was identified. There are no field records.

### Discussion

Most recent Cambodian otter records originate from market or captivity data and few have specific locality data. However, the lack of wildlife trade into Cambodia and the large volume of trade out of the country during the period under discussion (Sun Hean, pers. comm., 2000), leads one to believe that there is no reason to suspect any of these records to have originated from outside the country.

Otters appear to have been heavily exploited in Cambodia for a considerable period. In the early 1960's they were described in Preah Vihear Province as "probably very common judging by the numbers of skins for sale" (MILTON, 1964). Large traps, stated by local people to be for otters, were seen near Prek Toal in 1997/8 (Wayne Gum, pers. comm., 2001). Otter skins are regularly seen for sale for medicinal purposes in local markets in Phnom Penh and major provincial towns. Traditional Cambodian medicine, although not Chinese medicine (Endi Zhang, pers. comm., 2002), apparently uses the skin in wine to assist women during pregnancy and/or childbirth. BAIRD (1993) recorded that in 1992 villagers and forestry officials in southern Attapeu Province, Lao PDR, near the Cambodian border, reported that a group of Cambodians travelled up the Sekong River into Lao PDR in search of otter skins, and offered to buy whatever otter skins the villagers could supply. The capture and trade for local medicinal use in country is the greatest single threat to the continued survival of otter populations in Cambodia.

There is also a regional trade of otter skins to China, where they are used as hats for men and overcoats for ladies (Endi Zhang, *in litt.*, 2002). A confiscation in August 2001 at Baoshan, Yunnan (probably originating from Myanmar) included 134 pieces of otter skin (TRAFFIC, 2002). However the effect of this on Cambodian otter populations is unknown and there is no documentation on international trade in otter skins from Cambodia.

There have been no systematic otter surveys in inundated forest habitats in Cambodia. Indeed, the only recent field survey which systematically looked for otter signs was that of TIMMINS & MEN SORIYUN (1998), on the Sesan and Srepok, Ratanakiri and Stung Treng Provinces in May–June 1998. In 200 km of riverine survey only one sighting of an unidentified animal was made and no otter signs were found. This is surprising, as based on results of similar surveys in Laos on rivers with a similar magnitude of human use, otter signs would have been expected (DUCKWORTH, 1997).

The relative lack of field records from habitats where otters should be expected to be present and the domestic market demand for skins for medicinal use, means that the remaining populations of all otter species occurring in Cambodia are of urgent conservation concern. Further, otter-specific, survey work urgently needs to be carried out to try and identify remaining areas of importance, in order that appropriate conservation measures can then be initiated. Of greatest priority for such surveys are firstly the seasonally inundated forest and scrub around the Tonle Sap Great Lake, and secondly, the lowland, coastal rivers and areas of Melaleuca swamp forest, north and west of Sre Ambel, Koh Kong Province. The former, and potentially the latter, may hold globally significant populations of *L. sumatrana*.

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