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THE SMOOTH-COATED OTTER *LUTROGALE PERSPICILLATA* IN VIETNAM

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ABSTRACT

The smooth-coated otter (*Lutrogale perspicillata*) has been recorded in Dak Lak, a Vietnamese province and the status of otter species in Vietnam is discussed.

Keywords: otter, *Lutrogale perspicillata*, status, Vietnam

INTRODUCTION

The smooth-coated Otter (*Lutrogale perspicillata*) occurs through most of tropical Asia (Foster-Turley and Santiapillai, 1990, Corbet and Hill, 1992). It was categorised by IUCN (1996) as Globally Threatened: Vulnerable. It has been regarded as very rare in Vietnam and Pham Trong Anh et al. (1994) even speculated that it might already be extinct. However, in general the status of all otter species in Vietnam is very poorly known (Foster-Turley and Santiapillai, 1990). This note documents two recent sightings at one locality in the south of the country and puts them in the context of previous records.

STUDY AREA AND METHODS

Three months were spent in Dak Lak Province during April - July 1997 surveying for mammals, primarily large ungulates, Asian Elephant *Elephas maximus* and large carnivores (Le Xuan Canh et al., 1997). Three areas were visited (Fig. 1): Ea So, an isolated area of grassland and deciduous woodland in the north-east of the province; Yok Don National Park; and Ea Sup District (north of Yok Don). Dak Lak Province lies on the Tay Nguyen Plateau, the only part of Vietnam with extensive areas of lowland open deciduous forest. The three survey areas probably hold the best large areas of such habitat remaining in the province. Substantial lengths (over 15 km) of little-degraded streamside forest exist along both banks of three main rivers in the west, the Srepok, Ya H'leo and Ya Lop; all flow within the Mekong catchment. The major rivers in Ea So, the Ea Krong Hnang and Ea Puich, have shorter and more degraded lengths of forest and drain east across Vietnam to the coast in Phu Yen Province. In a South-east Asian regional context, this, lowland riverine forest, is the most threatened habitat in the area.

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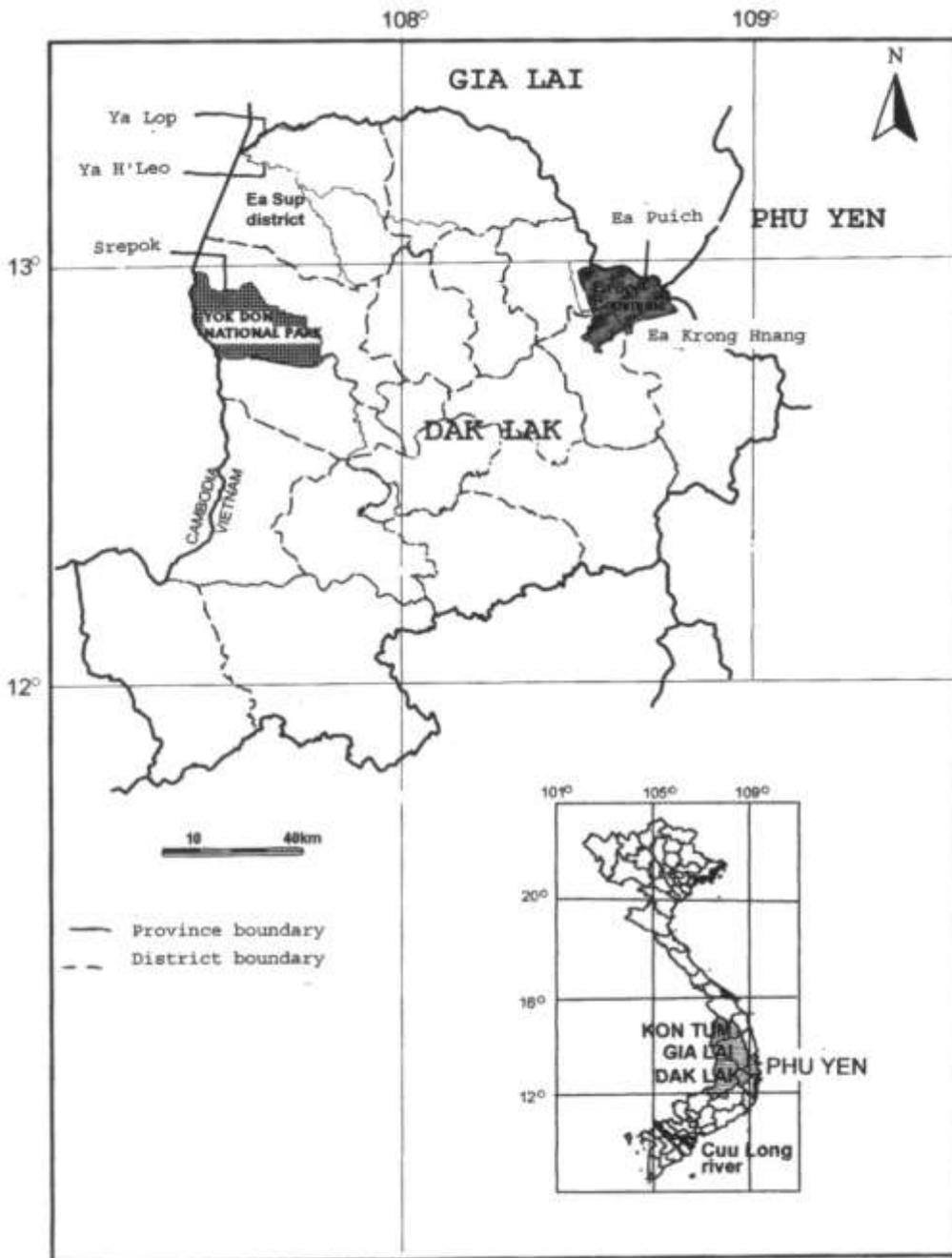


Figure 1: Dak Lak Province showing localities mentioned in the text; insert shows location of named provinces in Vietnam.

Approximately 250 sq. km of Ea So (12°49'-13°01'N, 108°31'-108°44') are remote enough from villages to be potential habitat of the target species. The area is currently afforded no protected status, although as a result of the survey, a proposal for protection has received at least provincial-level support. Much of the area (in total 104 km²) is open grassland supporting bushes at varying densities, with some extensive areas covered with barely penetrable tangles. Along the many small streams a riverine association resembling an intergrade between evergreen and mixed deciduous forest occurs. North of the Ea Puich, forest cover is much more extensive although large grassy glades are present even here.

The Ea Krong Hnang runs around much of the area. In the east it is a wide river and maps indicate several stretches of braiding with associated rapids and perhaps sandbars. Many small streams cross the area but the Ea Puich seems to be the only one flowing year round and possessing well developed riverine forest. In most places it is less than 12 m across. There are many rapids and at least one major waterfall; in the season of low-flow much bare rock is exposed in the channel. Permanent natural waterholes seem relatively few but many artificial ponds have been constructed by a group of soldiers stationed in the area.

Fieldwork took place in Ea So over 8 April - 8 May 1997, during which period only a few days were spent around the Ea Puich. A wide range of methods was used to maximise possibilities of detecting the target mammal species: direct observation by day and night, sign searches and interviews. However, the focus on the target species meant that it was inappropriate to devote much special effort to walking forest rivers searching for spraints and other signs of otters.

RESULTS

In the Ea So survey area, three smooth-coated otters were seen along a remote rocky stretch of the Ea Puich on 25 April 1997 at 15h30 and six (not all fully grown) were seen just upstream of the first site on 3 May 1997 at 05h00. Otters can be difficult to identify in the field but the first group was photographed and the second was observed at only 6 m range. The first group was unaware of the observer as he watched them for 30 minutes, the second fled on seeing him.

DISCUSSION

Status of smooth-coated otter in Vietnam

The only previous indications of the species from Vietnam are from the provinces of Dak Lak (Tran Hong Viet, 1994) and Kon Tum (two specimens from Sa Thay District collected during 1977-1983; Dao Van Tien and Tran Hong Viet, 1984, Tran Hong Viet, 1990), and a villager's report from Cuu Long (Pham Trong Anh et al., 1994; Pham Trong Anh, pers. comm.). The Natural History Museum, London, holds an adult female labelled merely "Annam"; this was collected by Vassal but there is little possibility of ever fixing a locality as he travelled widely in Annam (see, e.g., Bonhote, 1907). It is presumably the specimen referred to by Pocock (1941), and, mistakenly, as collected by Pocock in 1941 by Pham Trong Anh et al. (1994). Osgood (1932) traced no Vietnamese records of the species, and Van Peenen et al. (1969) cited only Pocock (1941).

It is unlikely that naturally the species is scarce in southern Vietnam: Osgood (1932) described it as "the most common otter of the Mekong" and although most streams in Vietnam are not in the Mekong catchment (see, e.g., Fig. 1 in Rainboth, 1996), they support in the south habitat similar to that in the Mekong basin. The belief that the species is rare in Vietnam may stem from the limited and disrupted work in southern Vietnam (as a result of decades of hostilities) and a recent concentration of fieldwork in mountainous areas more likely to support Eurasian otter *Lutra lutra* (see Corbet and Hill, 1992). Further survey in Dak Lak Province, particularly along rivers of the west (which drain into the Mekong) might prove the species to be considerably more widespread than has hitherto been believed. In the highland areas of the Tay Nguyen Plateau, *Lutra lutra* appears to be well-distributed; it was surveyed at two areas at

600-900 m asl in Gia Lai Province by Kuznetsov et al. (1993). However, studies on sympatry of otters in Huai Kha Khaeng, Thailand (Kruuk et al., 1994) suggest that extensive overlap is likely between the two in sites occupied on the Tay Nguyen Plateau.

No otters were found in the western survey areas in 1997, but Eurasian otter was listed for Yok Don NP by Dang Huy Huynh et al. (1990, 1995). The possibility that these records and indeed some others from Vietnam, refer to *Lutrogale perspicillata* should be re-examined, especially as Dang Huy Huynh (1994) admits no records of *Lutra lutra* from south of 16°15'N (some 350 km north of Yok Don).

There is little historical information on otter status in Vietnam. Monestrol (1952) after decades of hunting in Indochina (mostly in Vietnam), stated that otters occurred throughout, on even the smallest patches of water, from mountain streams to the coast, and even on offshore islets. Large groups were found on big water courses. He describes one observation of a group of at least 12-15 fishing together, from which he was able to kill five at one shot. Unfortunately, Monestrol often did not identify mammals (other than big game) to species. He does not indicate that he noticed that more than one species of otter was present in Indochina, so it is difficult to know what significance to give to his description of the otters of Indochina as very similar to those of Europe, with fur formed of fine and close, but not thick, hair. Nonetheless, the suggestion that otters were commonly encountered during time in the field is so different from today's situation in Vietnam (and Laos; Duckworth, 1997) that it is clear that numbers have dropped considerably or that they have become markedly shy.

Threats to riverine habitat in Dak Lak Province

Several lengths of little-degraded riverine forest remain in western Dak Lak because the province, until recently, supported very low densities of people, and the rivers draining into the Mekong were barely used for trade as they flow out of Vietnam into Cambodia. Most other rivers in Vietnam flow eastward to the sea and have been much more heavily settled along their lengths as they are more useful as arteries of communication.

However, human population in Dak Lak Province has doubled in a decade: this is the fastest growth rate in any Vietnamese province (Vu Tu Lap and Taillard, 1994). The province is a major development zone. New settlers have moved illegally into areas peripheral to Ea So and the population in the Ea Sup area is also growing, although such problems do not yet affect Yok Don NP. Broad-scale degradation of habitat is occurring in Ea So and parts of Ea Sup. Fire, set for a variety of intentional and unintentional reasons, is the main threat to streamside forest and has already damaged badly that along the Ea Krong Hnang. Further clearance of natural habitat for conversion to agricultural land will inevitably increase the risks of fire damage. No information was gathered on threats specific to otters, such as direct persecution.

Recommendations for further survey work

During a recent survey programme in Laos, otters proved much more difficult to see than were many other small carnivores (Duckworth, 1997). Further surveys for otters in Vietnam should involve specific searches for signs. The identification of sympatric

South-east Asian otters by sign is covered by Kruuk et al. (1993), although they do not discuss the signs of Hairy-nosed Otter *Lutra sumatrana*, which might occur in parts of Vietnam (Dang Huy Huynh, 1994). For surveyors lacking considerable past experience of separating the four South-east Asian otter species on the basis of signs, the cautionary words of Kruuk et al. (1993) about the identification of signs to species should be heeded. It is highly desirable that species identifications from new areas be supported by close direct field observations, physical remains or the checking of live animals in the possession of local people.

The entire forested lengths of the Srepok, Ya H'leo, Ya Lop, Ea Krong Hnang and the Ea Puich rivers should be walked or where possible boated in the low-flow season (December - April) to search for otters and their signs. During periods of high flow, signs are more difficult to find as sites are not so obvious and the irregular fluctuations in water level wash many away. Mason and Macdonald (1987) specifically warn against conducting spraint surveys in Europe after unseasonal spates, and such events are even more problematical in tropical areas. These rivers are wide enough potentially to support the highly threatened community of sand-bar birds (Small Pratincole *Glareola lactea*, River Lapwing *Vanellus duvaucelii*, terns *Sterna* spp. and perhaps Great Thick-knee *Esacus recurvirostris*; see Duckworth *et al.* in press) as well as other river channel bird species (the globally near-threatened Oriental Darter *Anhinga melanogaster* and fish-eagles *Ichthyaetus* spp. and the globally threatened Masked Finfoot *Heliopais personata*). It is thus desirable for birds to be surveyed concurrently with otters.

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