

SHORT NOTE

OCCURRENCE OF SMOOTH-COATED OTTER *Lutrogale perspicillata* IN SANKARAPARANI RIVER, PUDUCHERRY, INDIA

Kothandapani RAMAN¹, Sivangnanaboopathidossvimal², Sakhivel
KISHOREKUMAR³, Bawa M. KRISHNAKUMAR⁴, Kanagaraj M. SELVAN^{5*}

¹No:4/739, Dr, Ambedhkar Street, Kandamangalam (Post), Villupuram, Tamil Nadu, 605012

²No:65, Second Cross Street, Kurunji Nagar Extension. Lawspet, Puducherry, 605008

³No:24, Seventh Cross Street, Bharathinagar, Karauvadikuppam, Lawspet, Puducherry, 605008

⁴Salim Ali School of Ecology & Environmental Science, Pondicherry University, R.V.Nagar,
Kalapet, Puducherry 605014

⁵Scientist D/Joint Director, Project Elephant, Ministry of Environment Forest and Climate Change,
Indhira Paryavaran Bhawan, New Delhi, 110003
e-mail: tamildove@gmail.com



(Received 7th February 2018, accepted 30th December 2018)

Abstract: Lack of robust data has so far impeded a proper appraisal on the distribution of any taxa. In this article, we present a record of smooth-coated Otter (*Lutrogale perspicillata* Geoffroy Saint-Hilaire, 1826) in the Sankaraparani River, Union territory of Puducherry, India, an area where it has previously not been recorded. As otters have been preying on fish entangled in fishing nets, fishermen have been killing them in retaliation, which is a significant conservation issue for the otter population

Keywords: Smooth-coated Otter, Sankaraparani River, Puducherry

Citation: Raman, K, Sivangnanaboopathidossvimal, Kishorekumar, S, Krishnakumar, BM and Selvan, KM (2019). Occurrence of Smooth-Coated Otter *Lutrogale perspicillata* in Sankaraparani River, Puducherry, India. *IUCN Otter Spec. Group Bull.* **36** (1): 28 - 33

INTRODUCTION

Data on the distribution and ecology of many mesocarnivores are very limited. Three species of otters exist in India, of which smooth-coated Otter *Lutrogale perspicillata* is largest. Adapted for a semi-aquatic life, with webbed feet and a strong

tapering tail that aids in propulsion (Johnsingh and Manjrekar, 2013). Smooth-coated Otters prey readily on fish, shrimp, crayfish, crab, insects, and vertebrates, such as frog, mudskippers, birds, and rats, form a significant part of their diet (Prater, 1971; Foster-Turley, 1992; Hussain and Choudhury, 1998). Geographically, the smooth-coated Otter ranges from Indonesia in South East Asia, to Pakistan in the West with an isolated population of this species (*L. p. maxwelli*) in the marshes of Iraq; this is the westernmost end of its distribution (Hussain, 1993). It has been classified under Schedule II of the Indian Wildlife (Protection) Act 1972 and categorized as a Vulnerable by IUCN Red list (De Silva et al., 2015), furthermore, it is listed in Appendix II of CITES. Herein we present a new site locality with a few incidental observations of smooth-coated Otters (SCO) from the Puducherry on Coromandel Coast of southern peninsular India.

STUDY AREA

The Union territory of Puducherry (formerly known as Pondicherry) is located on the east coast of southern peninsular India. It consists of the districts of Karaikal, Yanam, and Mahe and Puducherry, the latter containing the capital; the union territories consist of adjacent collections of small enclave pockets in other states. One notable river in Puducherry originates on the western slope of Gingee hill in the Villupuram district of Tamil Nadu, and flows into the Bay of Bengal; it is known as the Sankaraparani river at Villianur in Puducherry district. Its ancient name was Varahanadi and Tondi (Figure 1). It splits off into separate branch at Ariyankuppam known as Chunnambaar (Vijayakumar et al., 2012). Bankside vegetation including *Borassus flabellifer*, *Prosopis juliflora*, *Leucaena leucocephala*, *Morinda tinctoria*, *Albizia lebeck*, *Bombex ceiba* and *Bambusa* sp. grows along the bank of the river (Figure 2), and provides ideal refuge for SCO; it is also habitat for Golden Jackal (*Canis aureus*), Common grey mongoose (*Herpestes edwardsii*), Jungle cat (*Felis chaus*), common palm Civet (*Paradoxurus hermaphroditus*) and small Indian Civet (*Viverricula indica*).

RESULTS

On 28th August 2017, we sighted a group of SCO including a pup while we were engaged on a bird survey. They were sinuously swimming parallel to the water flow (Figure 3). Upon sighting us, they bounded into narrow-leaf cattail (*Typha angustifolia*), which is ubiquitous in the river. SCO have not been recorded previously in the Union territory of Puducherry. Since then, we have visited the location occasionally and made observations, which are summarized in Table 1.

Threats

We interviewed a few residents and fishermen, who informed us that SCO have been depredating domestic fowl while they forage along the bank of the river and also catch and stealing the fish that are entangled in fishing nets. Because of this, fishermen have retaliated with the help of local hunters (*Narikuravar*). Also, indiscriminate sand mining in and along river bank destroy their habitat, holt being particularly vulnerable (Figure 4).

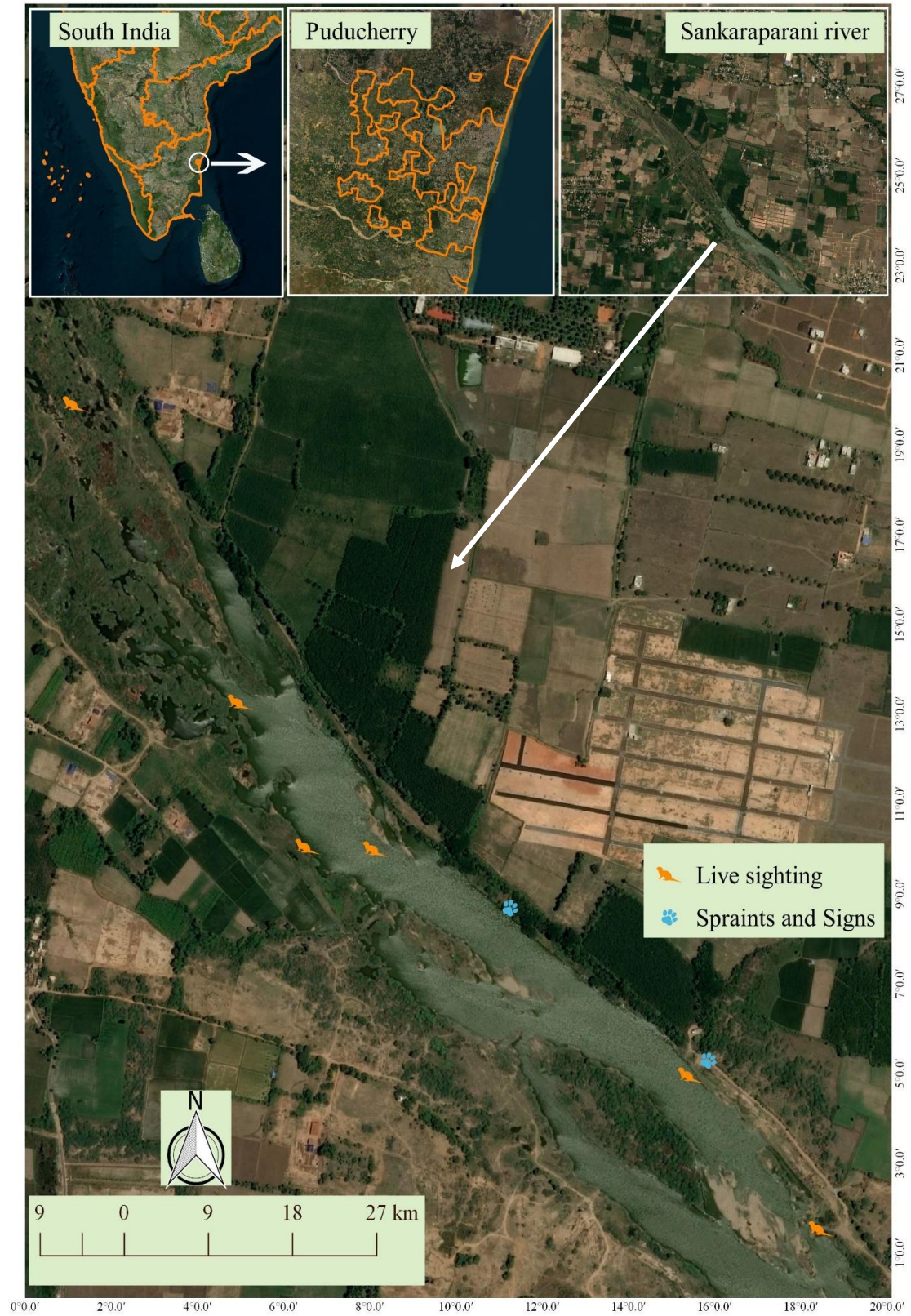


Figure 1. Sightings of *L. perspicillata* in Sankaraparani River, Puducherry



Figure 2. Typical habitat of *L. perspicillata* with natural vegetation



Figure 3. A group of Smooth-coated otter *L. perspicillata* (Photo credit: Aravindh)



Figure 4. Sand mining along the bank of the river

Table 1. Details of *L. perspicillata* records from Sankaraparani River.

Date of visit	No. of Ind.*	Time	Activity	GPS location
28.08.2017	3	1030	Couple of SCO were swimming parallel to water flow.	N11°54'46.857" E79°44'5.917"
10.09.2017	1	1600	Foraging till 1800	N11°54'56.503" E79°43'51.92"
01.10.2017	2	1500 to 1630	Basking on a pile of sand that was covered with moss	N11°55'2.771" E79°43'45.911"
22.10.2017	9	1830		N11°54'56.613" E79°43'48.907"
05.11.2017			Foot-print	N11°54'40.307" E79°44'11.719"
26.11.2017	1	0600	Rushed towards observer (who was swimming to photograph) and then emerged out of the water while looking at him for few minutes, possibly to investigate.	N11°54'46.85" E79°44'5.91"
10.12.2017	2	0600	Both were feeding on fish that was entangled in a fishing net	N11°54'47.5" E79°44'06.7"
30.12.2017			Foot-print & spraints	N11°54'54.0" E079°43'57.9"

*Number of live individuals

CONCLUSION

Retaliatory killing of SCO adversely affects the population locally. Strict implementation of the law for species conservation, and educating local residents and fishermen about the importance of this species in the ecosystem is crucial for this isolated remnant population. This initial observation provides an important baseline for further research and evaluation of conservation initiatives.

Acknowledgments - Authors are thankful to, Mr. Iyappan and Mr. Sivashankaran for identifications of plants and Mr. Aravindh for photographs.

REFERENCES

- De Silva, P., Khan, W.A., Kanchanasaka, B., Reza Lubis, I., Feeroz, M.M., Al-Sheikhly, O.F. (2015). *Lutrogale perspicillata*. The IUCN Red List of Threatened Species 2015.
- Foster-Turley, P. (1992). Conservation ecology of sympatric Asian otters *Aonyx cinerea* and *Lutra perspicillata*. PhD thesis., University of Florida.
- Johnsingh, A.J.T., Manjrekar, N. (2013). Mammals of South Asia, Vol. I. University Press, India.
- Hussain, S.A. (1993). Aspects of the ecology of smooth-coated Otters *Lutraperspicillata* in National Chambal Sanctuary. Unpublished Ph.D Thesis. Center for Wildlife and Ornithology. Aligarh Muslim University. Aligarh, India.
- Hussain, S.A., Choudhury, B.C. (1998). Feeding ecology of smooth-coated otter *Lutraperspicillata* in National Chambal Sanctuary. Proceedings of the Symposia of the Zoological Society of London. *Behav. Ecol. Riparian Mamm.* 71:229-250.
- Prater, S.H. (1971). The book of Indian animals. 3rd edition. Mumbai: BNHS-OUP.
- Vijaykumar, G., Sivasankaran, M.A., Murugaiyarn, V. (2012). Studies on the pollution levels in Ariyankuppam backwater, Puducherry region. *Int. J. Sci. Environ. Technol.* 1: 363-376.

RÉSUMÉ

PRÉSENCE DE LA LOUTRE À PELAGE LISSE *Lutrogale perspicillata* DANS LA RIVIÈRE SANKARAPARANI, À PUDUCHERRY, EN INDE

Le manque de données fiables a jusqu'ici empêché une évaluation adéquate de la distribution de tous taxons. Dans cet article, nous présentons les données d'observation de loutre à pelage lisse (*Lutrogale perspicillata* Geoffroy Saint-Hilaire, 1826) dans la rivière Sankaraparani, territoire de l'Union de Puducherry, en Inde, une région où elle n'avait pas encore été répertoriée. Lorsque les loutres maraudent des poissons emmêlés dans des filets de pêche, les pêcheurs à la ligne les tuent en représaille, ce qui constitue un problème de conservation important pour la population existante.

RESUMEN

PRESENCIA DE LA NUTRIA LISA *Lutrogale perspicillata* EN EL RÍO SANKARAPARANI, PUDUCHERRY, INDIA

La falta de datos robustos impide una apreciación adecuada de la distribución de cualquier taxón. En este artículo, presentamos un registro de nutria lisa (*Lutrogale perspicillata* Geoffroy Saint-Hilaire, 1826) en el río Sankaraparani, territorio de Puducherry, India, un área en la cual no había anteriormente registrada. Como la nutria merodea alrededor de los peces enredados en las redes de pesca, los pescadores las han venido matando en forma retaliatoria, lo que es un significativo problema de conservación para la población existente.