

## SHORT NOTE

### CONFIRMATION OF THE PRESENCE OF ASIAN SMALL-CLAWED OTTER *Aonyx cinereus* IN NEPAL AFTER 185 YEARS

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**Abstract:** The Asian Small-clawed Otter has not been observed in Nepal since 1839. Because of a lack of evidence of the species over such a prolonged period, it has been sometimes suggested that it is extinct in the country. Here, we present the first photographic evidence of Asian Small-clawed Otter in Nepal in 185 years. In November 2024, a juvenile Asian Small-clawed Otter was captured at the confluence of Rangun Khola and Puntara Khola of Dadeldhura District in far-western Nepal, was nurtured in the Forest Office for a week before released to the wild. The presence of a juvenile otter implies the presence of other otter individuals in the area. This rare observation is a significant confirmation of the species presence in Nepal and warrants detailed study and conservation initiatives to conserve the species.

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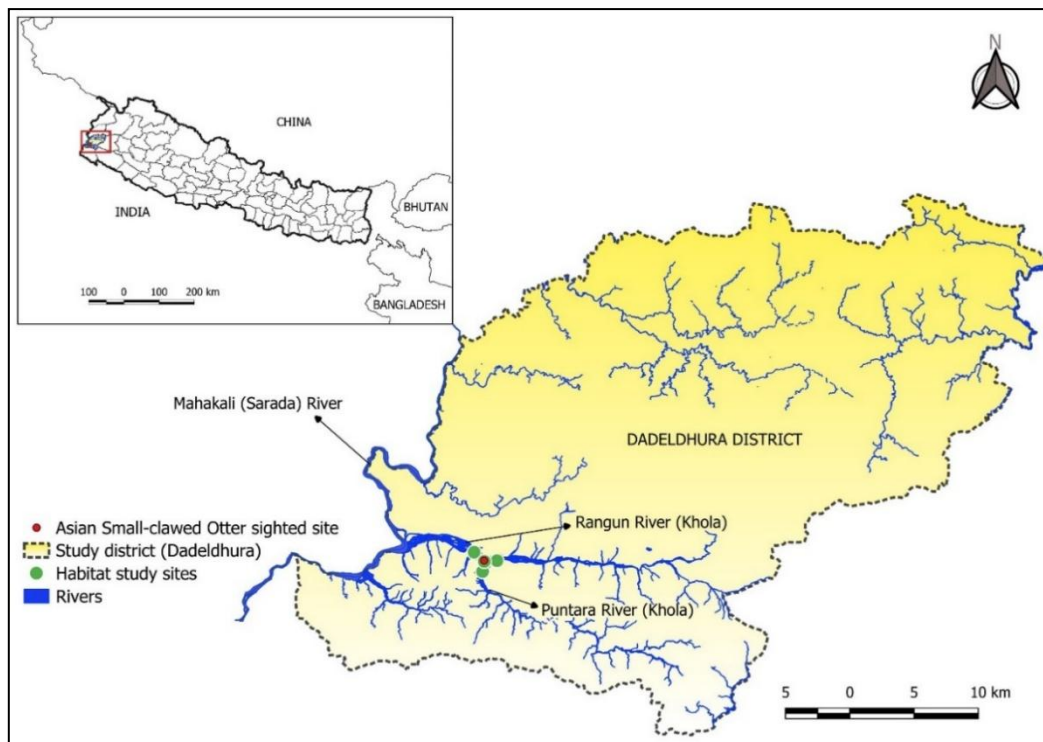
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## INTRODUCTION

Nepal has been said to be home to three species of otters, smooth-coated otter (*Lutrogale perspicillata*), Eurasian Otter (*Lutra lutra*) and Asian Small-clawed Otter (*Aonyx cinereus*) (Acharya and Rajbhandari, 2011). Confirmed evidence for the presence of Small-clawed Otters in Nepal has been lacking since the mid-19<sup>th</sup> century. The Asian Small-clawed Otter was last reported by Hodgson in 1939 (Hodgson, 1839). The Smooth-coated Otter has been the most studied Otter species of Nepal. Studies on Eurasian Otter is gaining momentum in recent years. The species' status was ambiguous for decades till was observed in the Berekot, Roshi and Tubang Rivers (Shrestha et al., 2021), in the Pelma River (Shrestha et al., 2022) and in area of Kathmandu Valley (Shrestha et al., 2023). In contrast, Asian Small-clawed Otter have not been recorded in Nepal; for more than a century and a half since 1839 (Acharya et al., 2023). Only anecdotal records from Nepal were in from Makalu Barun National Park, Kailali and Kapilvastu Districts (Jnawali et al., 2011). Globally categorized by the IUCN as Vulnerable (Wright et al., 2021) and listed as Data deficient species in National Red List Assessment of Mammals of Nepal (Jnawali et al., 2011). Deficient information on Asian Small-clawed Otter made its status in Nepal indeterminate (Jnawali et al., 2011).

## OTTER SIGHTING SITE AND SPECIES IDENTIFICATION

In November 2024, a juvenile Asian Small-clawed Otter was sighted at the river junction of the Rangun Khola and its feeder stream the Puntara Khola at Parsuram Municipality-12 of Dadeldhura District in far-western Nepal (29.132819°N 80.335374° E; 401m asl) (Fig. 1). Downstream, the Rangun Khola flows into the Mahakali River (also called as Sarada River) and then into the Karnali River in India.



**Figure 1.** Location map of Asian Small-clawed Otter capture.

Morphological characteristics and species identification of the otter in photographs and videos confirmed as an Asian Small-clawed Otter by IUCN Otter

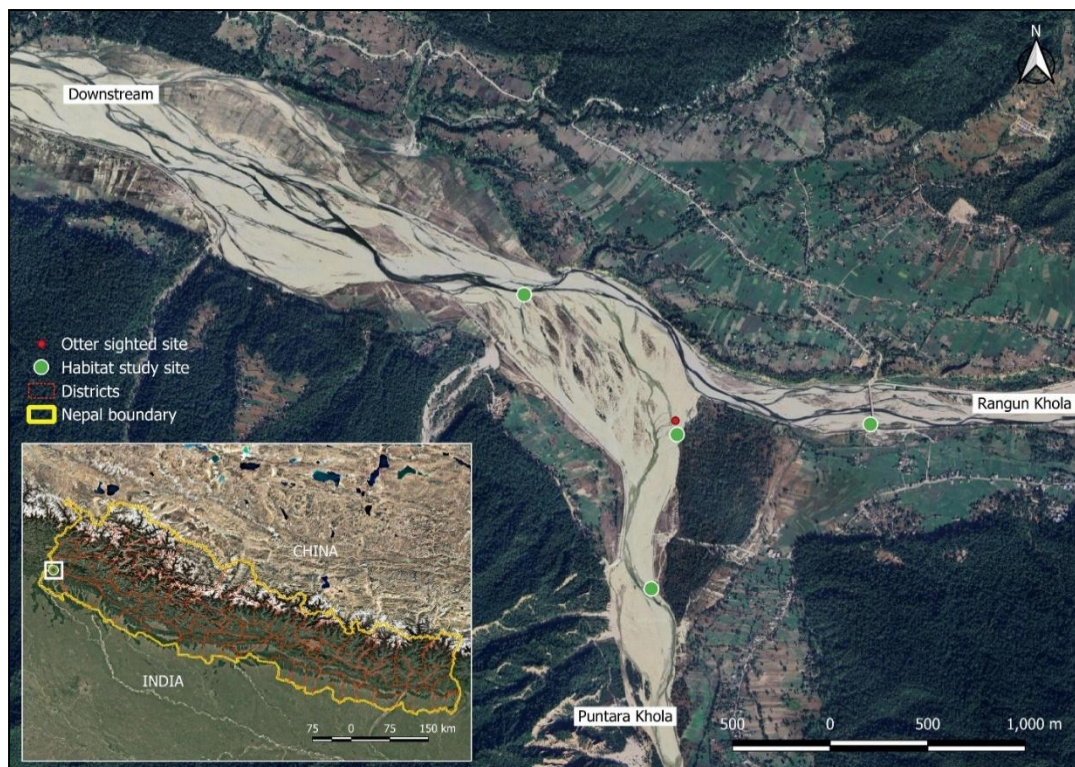
Specialist Group members (Fig. 2). The species has front paws with reduced nails, well adapted for catching small vertebrate and invertebrate prey in shallow and murky water (Hussain et al., 2011; Nicole Duplaix, *pers. comm.*). The juvenile otter was captured by a local, transferred to the nearby Sub-division Forest Office and nurtured for a week before released to the wild. The Forest Officer (co-author) shared photographs and videos with otter researchers in Nepal (primary author) for species identification, which was further forwarded to IUCN Otter Specialist Group members for the confirmation.



**Figure 2.** Asian Small-clawed Otter (Photograph: Rajeev Chaudary)

### **HABITAT NOTE**

A brief habitat study was carried out 1-km upstream and downstream from the otter sighting location as a baseline for future study. The habitat characteristics of four sites were noted: the otter observation location, 1-km upstream at the Rangun Khola and at feeder stream the Puntara Khola, and 1-km downstream in the Rangun Khola (Fig. 3). The location of the otter sighting was close to the human settlements Katar and Jodbudha. The bank-to-bank river width varied from 235-750m, but the river itself was shrunken due to the marked reduction of post-monsoon flow, with a tranquil flow and shallow depth. The riverbank was composed of large stones (>10cm-0.5m), small stones (1-10cm) and sand and mud with higher cover of large stones. The bank vegetation cover was sparse with small patches of *Imperata cylindrica* and *Chromolaena odorata*. The otter was observed at the edge of leasehold forest, where mining of stone and sand, washing, bathing and fishing activities were common.



**Figure 3.** Sites of Asian Small-clawed Otter observation site (red circle) and habitat studies (green circle).

## CONCLUSION

The sighting of an Asian Small-clawed Otter after 185 years is a remarkable discovery for conservation in Nepal, ending concerns that the species may have been extinct in the country. The sighting highlights the need for detailed study of the status of this species in Nepal and urgent implementation of conservation initiatives. Small-scale mining of construction materials from local rivers, primarily the Puntara Khola is likely to increase in the near future, with substantial impact on aquatic life. The traditional fishing practices using net casting, fishing hooks, draining water, and trapping fish in rice paddies are common. Besides, fishing using poison and explosives have been increasing. These activities will cause a decline in fish populations. Deforestation, habitat degradation, overgrazing, non-point source pollution and agricultural run-off are additional threats to the aquatic life in the area. There are five micro-hydro plants in the Rangun Khola with impacts to the aquatic biodiversity (USAID, 2018). Otters are resilient to highly modified anthropogenic landscapes (Lee, 1996; Theng and Sivasothi, 2016), flexible in habitat selection (Aadreaan et al., 2010; Weinberger et al., 2016) and able to recover from low numbers (Marcelli and Fusillo, 2009; Uscamaita and Bodmer, 2010). Nevertheless, given the rare occurrence of Small-clawed Otter in Nepal, mitigation measures are urgently needed for conservation of the species in this region. National otter survey, scientific studies of ecology and phylogeny of the species and conservation measures at priority sites are called for. Nepal has shown an exemplary effort in the conservation of megafauna, resulting in significant population increases of species such as rhinoceros and tigers. A timely conservation effort for this exceptionally rare species, a keystone aquatic mesocarnivore is now urgently needed in Nepal.

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## **RÉSUMÉ : CONFIRMATION DE LA PRÉSENCE DE LA LOUTRE CENDRÉE *Aonyx cinereus* AU NÉPAL APRÈS 185 ANS**

La loutre cendrée n'a plus été observée au Népal depuis 1839. En raison du manque d'indices de présence de l'espèce sur une période aussi prolongée, il a parfois été suggéré qu'elle était éteinte dans le pays. Nous présentons ici la première preuve photographique de la loutre cendrée au Népal depuis 185 ans. En novembre 2024, une loutre cendrée juvénile a été capturée au confluent de Rangun Khola et de Puntara Khola dans le district de Dadeldhura, à l'extrémité ouest du Népal. Elle a été alimentée au Forest Office pendant une semaine avant d'être relâchée dans la nature. La présence de loutres juvéniles implique l'existence d'autres individus dans la région. Cette observation rare est une confirmation significative de la présence de l'espèce au Népal et justifie une étude détaillée et des initiatives de conservation afin de protéger la loutre cendrée.

## **RESUMEN : CONFIRMACIÓN DE LA PRESENCIA DE LA NUTRIA DE UÑAS PEQUEÑAS ASIÁTICA *Aonyx cinereus* EN NEPAL DESPUÉS DE 185 AÑOS**

La Nutria de Uñas Pequeñas Asiática no ha sido observada en Nepal desde 1839. Debido a la falta de evidencias de la especie por un período tan prolongado, se ha sugerido algunas veces que estaba extinguida en el país. Aquí, presentamos la primer evidencia fotográfica de una Nutria de Uñas Pequeñas Asiática en Nepal, en 185 años. En Noviembre de 2024, fue capturado un juvenil de Nutria de Uñas Pequeñas Asiática en la confluencia de Rangun Khola y Puntara Khola, del Distrito Dadeldhura, en el extremo occidental de Nepal, y fue mantenido y cuidado en cautiverio por la Oficina Forestal, durante una semana, para luego liberarlo al ambiente silvestre. La presencia de una nutria juvenil implica la presencia de otros individuos de nutria en el área. Esta rara observación es una confirmación significativa de la presencia de la especie en Nepal y amerita un estudio detallado e iniciativas de conservación para proteger a la especie.

### **सारांश**

#### **नेपालमा १८५ वर्षपछि सानो ओत (*Aonyx cinereus*) अस्तित्वमा रहेको पुष्टि**

नेपालमा सानो ओत सन् १८३९ यता लामो समयावधी सम्म देखानपर्नु र अस्तित्वको कुनै ठोस प्रमाण नभएको कारणले यस प्रजातिलाई देशबाट लोप भइसकेको आशंका गरेको थियो। हामीले १८५ वर्षपछि पहिलो पटक नेपालमा सानो ओत फेला परेको फोटो सहित प्रमाण प्रस्तुत गरेका छौं। सन् २०२४, नोभेम्बर महिना, सुदूरपश्चिम नेपालको डडेल्धुरा जिल्लाको रंगुन खोला र पुन्तरा खोलाको संगममा एउटा सानो ओतको छाउरा भेटिएको थियो। एक हप्तासम्म पालनपोषण पश्चात छाउरा सानो ओतलाई पुनःबासस्थानमा स्थान्तरण गरेका थियौं। छाउरा सानो ओत भेटिनु उक्त स्थानमा अन्य ओतहरु पनि भएको जनाउँदछ। सानो ओतको यस महत्वपूर्ण अभिलेखसंगै विस्तृत अध्ययन र संरक्षणका पहलहरुको आवश्यकता छ।