

# Observations of Crab-eating Mongoose *Herpestes urva* in eastern Nepal

Sanjan THAPA

## Abstract

Crab-eating Mongoose *Herpestes urva* has been reported from within and outside protected areas of Nepal. However, specific localities are poorly documented. Three individuals were observed (of which one was photographed) in agricultural land at Madi Rambeni-Ward n° 2 and 3, Sankhuwasabha district, eastern Nepal. These are the first detailed records with exact locality of the species in Nepal published since 1925, and the first from eastern Nepal.

**Keywords:** agricultural habitat, distribution, new locality record, Sankhuwasabha district

## पुर्वी नेपालको संखुवासभा जिल्लाको मादीमा गँगटे न्याउरीमुसाको अवलोकन

### सारांश:

नेपालको संरक्षित क्षेत्र भित्र र बाहिर गँगटे न्याउरीमुसा पाइन्छ । तर तिनीहरूको वितरण भएको स्पष्ट ठाउँ उल्लेखित कमै मात्र जानकारीमा छ । पुर्वी नेपालको संखुवासभा जिल्लाको मादी राम्बेनी वडा नं. २ र ३ मा तीन वटा गँगटे न्याउरीमुसाहरू खेतमा अवलोकन गरीएको छ (जसमध्ये एउटा न्याउरीमुसाको तस्वीर खिचीएको छ ) । सन् १९२५ पश्चात नेपालमा र पुर्वी नेपालमा यस जनावर पाइएको निश्चित स्थान उल्लेख गरीएको यो पहिलो अभिलेख हो ।

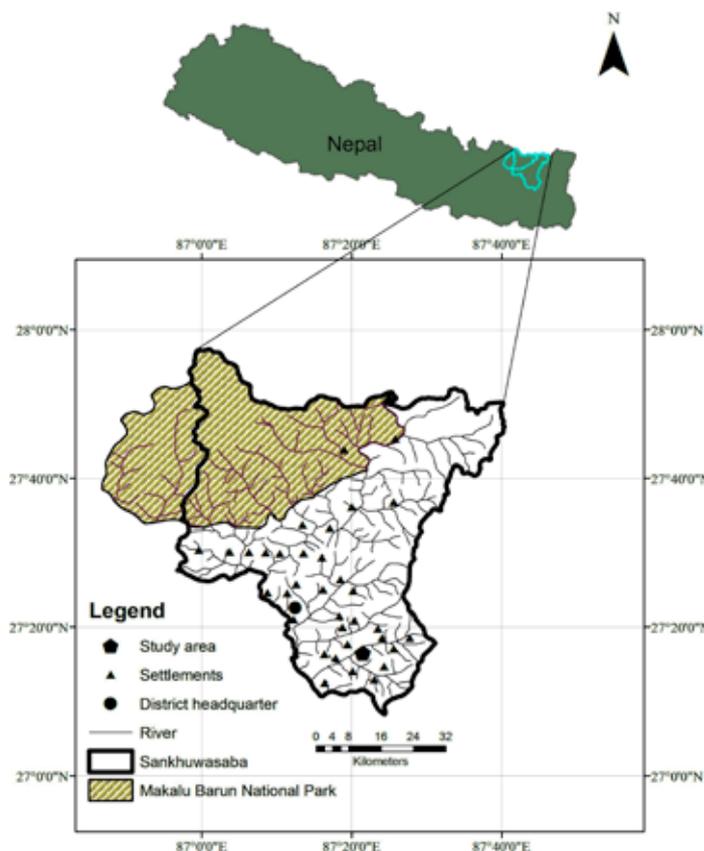
## Background

Crab-eating Mongoose *Herpestes urva* was first reported, under the name *Gulo urva*, in Nepal in 1836 from the country's central and northern regions (Hodgson 1836). Hodgson presented several specimens to the natural history section of the British Museum (BMNH), including skulls and a drawing of an adult with details of hind feet (Gray 1846, 1863). Checklists and other publications about Nepal's wildlife (Frick 1969, Mitchell 1975, Suwal & Verheugt 1995, Shrestha 1997, Majupuria & Kumar (Majupuria) 2006, Baral & Shah 2008, Jnawali *et al.* 2011) typically include Crab-eating Mongoose. However, only Fry (1925) published records of specific localities, reporting specimens of single females each from Gorkha, central Nepal; Chengli (perhaps today's Chyangli Village Development Committee in Gorkha district); and Boitari, in Gorkha district. More recently, it has been listed as occurring in the Annapurna Conservation Area, Chitwan National Park, Bardia National Park, Suklaphanta Wildlife Reserve and Ilam (Suwal & Verheugt 1995, Majupuria & Kumar (Majupuria) 2006), and in Koshi Tappu and Parsa Wildlife Reserves (Jnawali *et al.* 2011). According to Jnawali *et al.* (2011), it occurs in Nepal between 100 m and 1,300 m and is fairly common in the lowland forests in the country's east (in Dharan Forests and Mai Valley forests). None of these modern locations seems to be associated with details of any specific records.

Crab-eating Mongoose's conservation status has been assessed nationally as Vulnerable C2a(i) with a population size guesstimated at fewer than 1,000 individuals (Jnawali *et al.* 2011). However, it is not legally protected in Nepal.

## Observations

In 2013, three individual Crab-eating Mongooses were sight-



**Fig. 1.** Area of Crab-eating Mongoose *Herpestes urva* sightings, Madi Rambeni-Ward n° 2 and 3, Sankhuwasabha district, eastern Nepal.

ed, of which one was photographed, at Madi Rambeni-Ward n° 2 and 3, Sankhuwasabha district, eastern Nepal (Fig. 1). Madi Rambeni is in a sub-tropical bioclimatic zone (Bajracharya 1996). Rice is a major crop during the monsoon season and



**Fig. 2.** Crab-eating Mongoose *Herpestes urva* (two views). Kantar, Madi-Rambeni-3, Nepal, 2 February 2013.

is harvested during November–December. The fields remain dry and muddy, near water sources, after the harvest until the end of March. Geographical co-ordinates and elevations were measured using a Garmin Etrex GPS. The former use the WGS84 datum and the latter are approximate.

One Crab-eating Mongoose was observed on 4 January 2013 at 14h55 in Dhunge (27°16'29.2"N, 87°21'30.3"E) at a recorded elevation of 1,264 m. Running through a harvested rice terrace, it stopped and stared for about 30 seconds then crossed a stream and entered a stand of bamboo, alder *Alnus nepalensis* and cardamom cultivation. Its body was brownish-grey with a reddish tinge at the back. The tail was also brownish-grey with a reddish tinge. The brownish-grey head had a distinct white band running from below the ear backward across the neck to terminate just above the foreleg. The animal was seen just for about a minute.

After searching for nine days, in the hope of photographic proof of the species, another individual sighted on 2 February at 16h17 in Kantar, Madi-Rambeni-3 (27°16'34.3"N, 87°21'31.6"E) at a recorded elevation of 1,201 m was immediately photographed (Fig. 2). It was inserting its mouth in the mud, probably searching for food in a harvested rice terrace filled with water (sim, in Nepali) along the Jamuna stream. For closer photography, I approached it, but it fled into bamboo along the stream. The animal was observed for 2–3 minutes. Its body was dark grey with white hair tips. Its nose was distinctly

red. Its tail was bushy with the distal part brownish in appearance while the basal part was concolorous with the body.

One more individual was sighted on 26 March 2013 at 16h30 in Patidhara (27°16'31.2"N, 87°21'24.3"E) at a recorded elevation of 1,198 m. It was observed for about 3–4 minutes, apparently seeking food in the sim along the stream. The animal was pale grey in colour, differing from the first two sightings by the absence of any reddish hue.

The local people in this area called Crab-eating Mongoose 'dumsi ko mulya', literally meaning a hybrid of porcupine *Hystrix brachyura* and marten *Martes*. They said that it was seen singly, in duos, or in groups of up to eight individuals, feeding on frogs, tadpoles and insects in waterlogged harvested terrace, particularly around sunset. They reported that these animals live in burrows near rocks, and run here and there in the fields in the afternoon. When disturbed they immediately flee. They reported that an individual once attacked a chicken near a house amid rice fields, but failed to kill it.

## Discussion

The present observations seem to be the first specific Crab-eating Mongoose records published for Nepal since Fry (1925), and the first for eastern Nepal. However, there are several other undocumented locality records from Ilam District, and the species is not uncommon in certain patches of Dharan Forests IBA, Sunsari District, east Nepal (H. S. Baral *in litt.* 2013). These three records from Sankhuwasabha district fall within the narrow altitudinal range of 1,198–1,264 m. However, local people reported observing the species at lower elevations and up to 1,800 m. This range needs to be confirmed, as does the statement in Majupuria & Kumar (Majupuria) (2006: 122) that it "presumably" ranges up to 2,500 m.

This is a commonly seen mongoose in much of mainland Southeast Asia (e.g. Duckworth 1997, Than Zaw *et al.* 2008), but not in Nepal. The fundamental reason for its apparent rarity in the country remains unclear, making it noteworthy that individuals can be, apparently, frequently encountered in Sankhuwasabha district. These records fall within the elevation range stated for Nepal. The locations lie outside the distribution as mapped by Jnawali *et al.* (2011), but between the latter and the species's main range in Southeast Asia.

Many Southeast Asian records of Crab-eating Mongoose come from evergreen forest (including degraded areas), often near water, with some from deciduous forest in Thailand, Cambodia and southern Viet Nam, and from lowland wet evergreen forests, secondary forest and around industrial areas (oil refineries) in India (Duckworth 1997, Van Rompaey 2001, Duckworth & Timmins 2008, Than Zaw *et al.* 2008). Additionally, there are records from rice fields and other agricultural areas, and even near human settlements (Duckworth & Timmins 2008). In Nepal, this species is said to inhabit tropical and subtropical evergreen and moist deciduous forests (Jnawali *et al.* 2011), but the Sankhuwasabha observations come from agricultural terraces near streams, amid fragmented vegetation and human settlements. Local people indicated burrows amid the farmland that they attributed to this species. However, the sites lie only about 1–2 km from forest, so it cannot be excluded that these animals using farmland depend on adjacent forest in some way. These sightings in Nepal were by daylight,

as is typical in Southeast Asia (Than Zaw *et al.* 2008 and references therein).

Poaching for fur, habitat loss and degradation from wetland drainage, unmanaged pollution of waterways, and clearing of forests for livestock and agriculture have been assessed as the major threats to the species in Nepal (Jnawali *et al.* 2011). I found no evidence of poaching, but given the agricultural nature of the habitat, pollution of agricultural fields and the water channels by excessive use of fertilisers and pesticides certainly comprise possible threats for this species in this area.

### Acknowledgements

I would like to thank Hem Bahadur Katuwal of Small Mammals Conservation and Research Foundation for providing the map. I would also like to acknowledge local people for providing the information. Finally, I am thankful to three referees Angelika Appel, Hem Sagar Baral and Karan B. Shah, for their help in refining the manuscript.

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**Small Mammals Conservation and Research Foundation,  
P.O. Box 9092, Sundhara, Kathmandu, Nepal.  
Email: sanjan@smcrf.org**