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Cover: ***Pipistrellus tenuis*** **recorded during the small mammalian fauna study, Manipur, India. © Uttam Saikia.**

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NOTE

First photographic evidence of the Binturong *Arctictis binturong* (Raffles, 1821) from Nepal

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Binturong, also known as bearcat (Carnivora: Viverridae), is thought to be a close relative of the palm civet. It is the largest civet distributed in tropical and sub-tropical forests of southeastern Asia (Willcox et al. 2016). Binturong has a thick muscular prehensile tail, the only other carnivore which has a truly prehensile tail is the tropical American Kinkajou *Potos flavus*, a member of the Procyonidae, which closely resembles the Binturong in habits (Pocock 1939). The historical distribution and occurrence of Binturong in Nepal Himalaya are of doubtful accuracy (Blandford 1891). However, Pocock (1939) mentions that the species was distributed in the eastern Himalaya. According to Baral & Shah (2008) and Jnawali et al. (2011), the species is distributed in a small area in eastern Nepal, but the exact locality is not specified.

Nine subspecies of Binturong have been proposed (Pocock 1939; Cosson et al. 2007) and taxonomic clarification is needed where the population is restricted to small geographical ranges (Schreiber et al. 1989). The species is listed as Vulnerable in the IUCN Red List of Threatened Species (Willcox et al. 2016). In Nepal, the species is listed as Data Deficient (Jnawali et al. 2011). Globally, 30% of the population has declined over the last 18 years due to habitat loss as well as hunting and trapping for both local uses as food and wildlife trade (Willcox et al. 2016). In some countries, Binturongs are caught for the pet trade. In Indonesia, Binturongs are live trapped and kept in farms to produce Civet Coffee (Kopi Luwak), and the mortality rate is relatively high due to poor housing conditions (D'Cruze et al. 2014).

Binturong are primarily arboreal, and live in mature dense tropical forests (Pocock 1939; Corbet & Hill 1992). They are omnivorous, their natural diet consists of fruits, small animals such as insects, birds, and rodents (Blandford 1891; Willcox et al. 2016). Figs constitute the major proportion of their diet (Lambert 1990; Nakabayashi & Ahmad 2018). The species is known to occur in Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Vietnam (Willcox et al. 2016). Binturongs are mostly nocturnal and crepuscular (Lambert 1990; van Schaik & Griffiths 1996; Austin 2002; Grassman et al. 2005), but there are also records of their diurnal activities (Nettelbeck 1998; Datta 1999). Binturong was once thought

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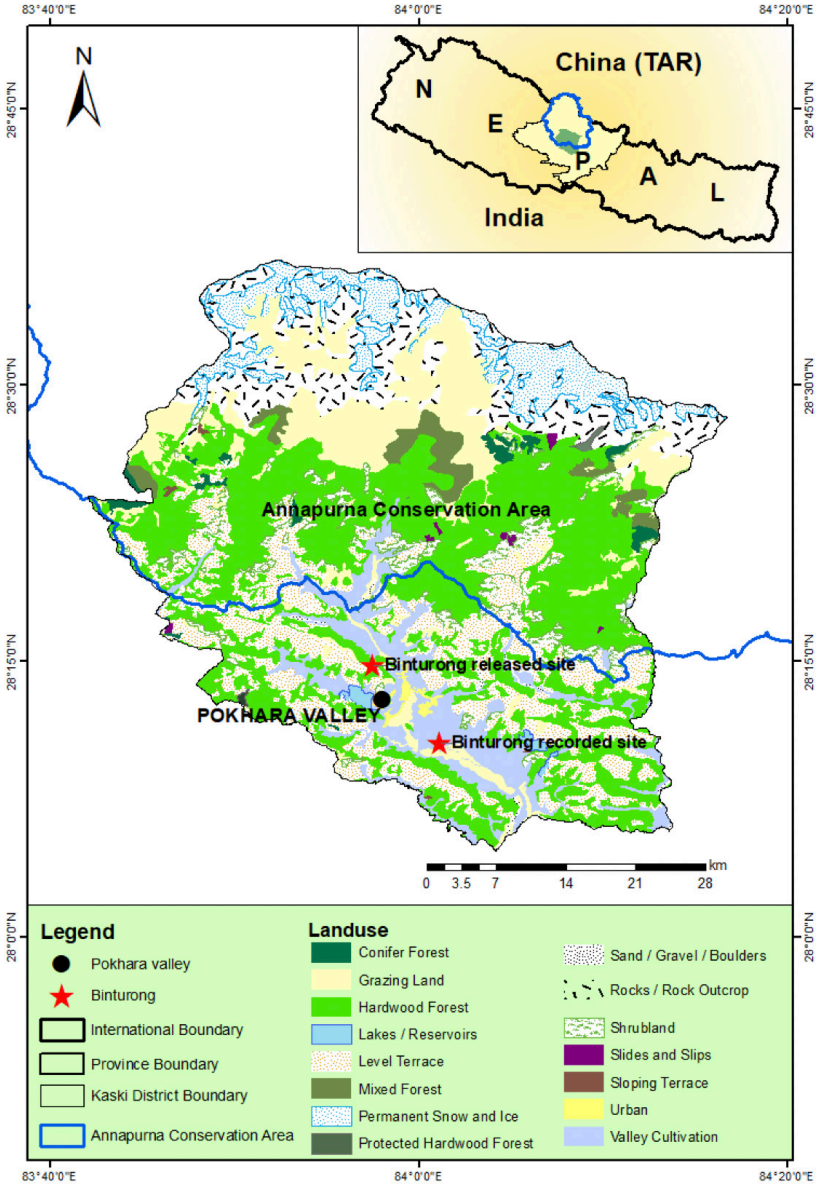

Figure 1. Map showing the recorded and released sites of Binturong in Pokhara Valley of western Nepal.

to be relatively common within its distribution range, but it is now approaching national extirpation in some range countries including Viet Nam and China (Willcox et al. 2016). Their wild population is still unknown.

On 20 July 2022 a young Binturong was observed at 0700 h struggling in a flooded house drainage, at Parshyang (28.175^{0}N, 84.019^{0}E; 916 m), Pokhara Valley, western Nepal (Figure 1). The drainage was overflowed due to the water coming from the traces of paddy fields and a small seasonal brook that were surrounded by mixed forest including Drooping Fig *Ficus semicordata*, Guava *Psidium guajava*, & Banana *Musa* spp. and ended at the Khode pokhari (a pond). The location of the area is <20 km south of Annapurna Conservation Area (ACA), the largest protected area of Nepal (7,629 km^2). The diverse topography and habitats in the ACA might serve as an important habitat for the species. The nearby forest patches of Thotnekhola Community Forest are also connected to the southern part of ACA. Mr. Radhakrishna Rijal, a local resident observed a small, shaggy creature lying in the drainage. The animal was struggling with the water current for an unknown period, and as a result it was exhausted. A few people from the neighboring area immediately gathered at the site and rescued the animal, which was taken to the house and provided rice mixed with milk as well as earthworms to eat. The Division Forest Office (DFO), Kaski district was notified requesting for a visit and to take further care of the rescued animal. The DFO personnel took the animal and kept it for one night and two days in their animal rescue centre. They provided first aid treatment, fed it with chayote squash and

bananas, and constantly monitored its activities. Finally, the animal was released in the Thotnekhola community forest (28.245^{0}N, 83.958^{0}E; 1,293 m), Sharangkot, Kaski (Image 1, Figure 1).

According to Prater (1971) an adult Binturong head and body length is 61 to 96 cm, and tail length is 50 to 89 cm, almost equal to body length. An adult weighs 9–20 kg (Cosson et al. 2007). Therefore, judging by the body size from the photographs (Mr. Chhetra Bahadur Thapa pers. comm.) it is likely that the present animal was 2–3 months old.

Binturong have distinct white whiskers, long coarse black to brown fur with white, silver, or rust on the tips, the face has lighter fur, padded paws, flat-footed naked hind foot below, and prehensile tail (Raffles 1822; Blanford 1891; Pocock 1939). Present individual has a long shaggy black coat with light white frosting, tufted ears with a white edge, a thick muscular prehensile tail gradually tapering and slightly curling inwards at the tip. It has also long white whiskers forming a peculiar radiated circle round the face and five-toed feet with bare sole and large strong claws. These morphological features (Image 2a–d) closely match with the description provided by the above authors thus confirming its identification.

According to Blandford (1891) and Willcox et al. (2016), Binturong have not been previously recorded in Nepal. The occurrence of this species in Nepal without exact geographical references had been mentioned by Pocock (1939), Baral & Shah (2008), and Jnawali et al. (2011). The exact distribution in Nepal was unknown until the present information. This is the first photographic evidence record of the species from the country. For last 10–15 years camera traps have been widely used in wildlife research and monitoring in many areas of Nepal from lowland Tarai to high mountains (Chetri et al. 2014; Shrestha et al. 2014; Lama et al. 2019; DNPWC & DFSC 2022). A few species of mammal new to the country such as Steppe Polecat (Chetri et al. 2014), Pallas's Cat (Shrestha et al. 2014), Ruddy Mongoose (Subba et al. 2014), Rusty-spotted Cat (Lamichhane et al. 2016), and Marbled Cat (Lama et al. 2019) were recorded, but Binturong were not photographed. Research on the smaller mammalian taxa is highly limited. As a result, their occurrence, exact distribution, and conservation status are still poorly known. It is believed that the present finding will draw the attention of the researchers, students and concerned authorities for conducting a further study on the species in Nepal.

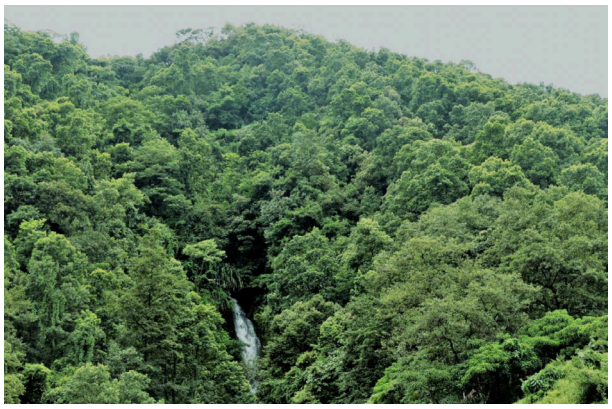

Image 1. A section of the forest patch where the young Binturong was released. © Purna Bahadur Ale.

Image 2a. Young Binturong in a flooded drainage where the animal was first located showing bare sole a characteristic of the civets. © Samjhana Bhandari.

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Image 2b. Young Binturong with an almost as long tail as head and body together. © Smreeti Poudel.

Image 2c. Young Binturong (note the long shaggy black to brown coat, light white frosting on the body, tufted ears, long white whiskers forming a peculiar radiated circle round the face, five-toed feet with large strong claws). © Samjhana Bhandari.

Image 2d. Young Binturong's lateral view showing a long prehensile tail gradually tapering and slightly curling inwards at the tip. © Laxmi Sunar.

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