



New records of bats in Nepal's Shuklaphanta National Park



The Shuklaphanta National Park (ShNP) was established as a wildlife reserve in 1976 and later declared as national park in 2017. The area is located at the southwestern corner of Nepal in Terai and Shivalik physiographic zones of Kanchanpur District. It lies between 28.763–29.047 N latitudes and 80.095–80.361 E longitudes. The altitude ranges 175–1,300 m (Poudyal et al. 2019).

With an area of 305km², the ShNP supports a wide range of biodiversity. The forests cover about 60% of the park area, grasslands for which the park is especially well-known, covering 27% of the park, and wetlands including rivers, streams, small lakes, and marshlands covering about 10% of the park (Poudyal et al. 2019). The national park

boasts a high total of 24 species of fish, 15 species of amphibians, 56 species of reptiles, 450 species of birds, and 56 species of mammals (DNPWC 2003; Poudyal & Chaudhary 2019; Poudyal et al. 2019; Rawat et al. 2020). Other animal taxa in the park are poorly studied.

The bat species are the scantily documented mammalian species in ShNP. Indian Flying Fox *Pteropus medius*, Greater Short-nosed Fruit Bat *Cynopterus sphinx*, and Greater Asiatic Yellow House Bat *Scotophilus heathii* were recorded in Kanchanpur District in the periphery of the park (Chaudhary & Ghimire 2010; Acharya 2015); however, there were no evidences of these species found inside the park until 2016. Later, some opportunistic

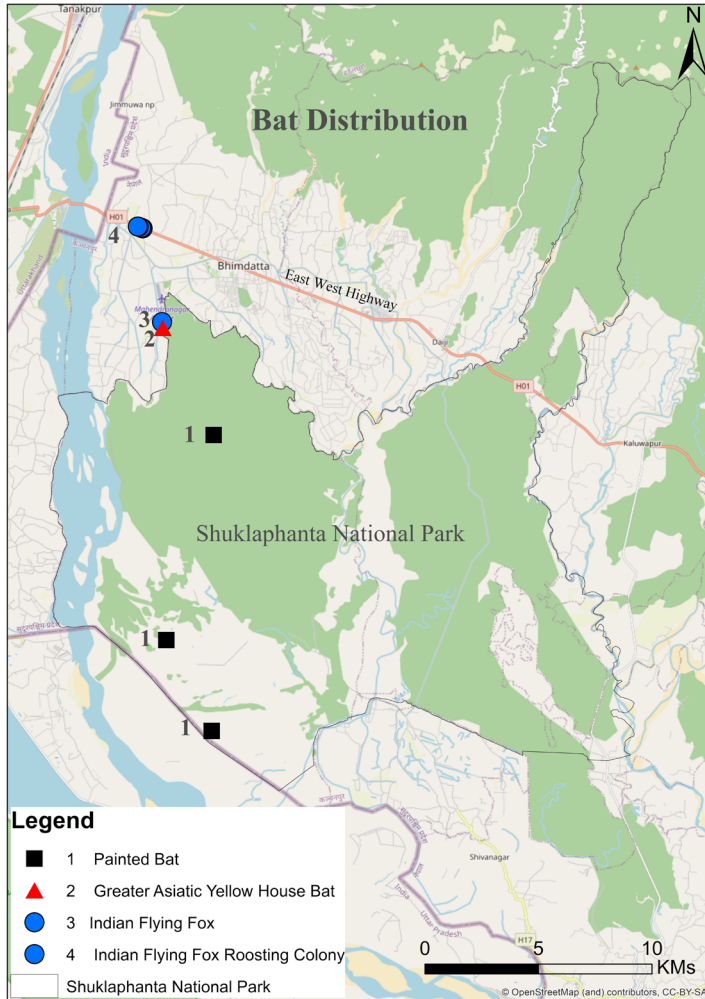


Fig 1. Map showing recorded points.



Greater Asiatic Yellow House Bat.

sighting and photographs were taken. We confirmed photographic records of three bat species, i.e., Greater Asiatic Yellow House Bat, Indian Flying Fox, and Painted Bat *Kerivoula picta* inside the park area during 2016–2020. The record is based on photographs via sighting in different period and camera trap survey conducted for tiger and its prey base in 2016 (Fig. 1).

1. Greater Asiatic Yellow House Bat *Scotophilus heathii* (Horsfield, 1831)

The opportunistic sighting of the species was obtained for the first time near Majhgaon area at the park headquarters (chief warden’s residence) on 19 May 2019 at night 22.00h and photographed the next morning (Poudyal et al. 2019); inveterate the first locality record inside the park. The species skull was badly exposed, might be it has survived from a terrible accident.

2. Painted Bat *Kerivoula picta* (Pallas, 1767)

Painted Bat was photographed at three locations in three different



occasions (18.14, 19.41 & 02.28 h on 23 & 24 October, & 11 December) from the western part of the park (Shuklaphanta grassland and associate forest areas) during the camera trapping survey in 2016 (Poudyal et al. 2019). This was second locality record in Nepal and the first record from ShNP. Myers et al. (2000) had provided the first locality record of this species from Chitwan, Nepal on 17–18 March 1990.

3. Indian Flying Fox

***Pteropus medius*
(Brünnich, 1782)**

In the evening of 1 September 2020, a few cauldron of Indian Flying Foxes were noticed opportunistically at the park office premises foraging on Asoka *Saraca asoca* fruits;



Indian Flying Fox.

consuming flesh and juice, and spitting out seeds and pulp. We documented this as first locality record in the park. Next evening, 19.12–19.20 h, a big cauldron of around 72 individuals was counted flying towards the Asoka garden near park headquarter for forage. Acharya (2015) had explored a roosting colony of 385 individuals at Sukasal in the

western part of Kanchanpur District 4km north from Majhgaon. The same colonial area was visited in the morning (06.30–07.35 h) of 4 September 2020 and counted 1698 individual roosting in four Silk Cotton Trees *Bombax ceiba* alongside the east-west highway at Bhimdutta Municipality ward no 5. Some photographs of the



Indian Flying Fox colony





species including a video of a copulating pair was obtained.

Recommendation

Priority on wildlife conservation in Nepal has been focused on only large mammals (Heinen & Yonzon 1994) hence very less research regarding bats and other mammalians have been conducted. The update of the bat species from the western part of Nepal is scanty and unexplored. We strongly recommend the research based documentation, ecology, and habitat preference of bat species from western part of Nepal including ShNP.

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