First record of ashy minivet *Pericrocotus divaricatus* in Kathmandu Valley, Nepal

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Abstract

The status and distribution of birds in Nepal is being updated as the number of bird species and records increase. We present a distributional update of ashy minivet *Pericrocotus divaricatus*, a rare winter visitor to Nepal. We made an opportunistic sighting of the species on 25 February 2022 during a bird survey along the Hanumante River, Bhaktapur, Nepal. AM had been previously recorded in Nepal at Koshi Tappu Wildlife Reserve and at Sauraha, Chitwan District, but not in the Kathmandu Valley. Thus, our record of this species in Bhaktapur (Kathmandu Valley) is a new distributional record of the species in Nepal. Rapid change in land use is posing threats to bird habitats; therefore, we recommend maintaining a continuous green corridor along the Hanumante River.

Keywords: Avifauna; Bhaktapur; Distribution; Hanumante River; Vagrant birds

1 | Introduction

Nepal, a biodiversity rich country, has a growing list of avifauna with a total of 892 bird species on record up to 2022 (BCN & DNPWC 2022). The list can be expected to continue increasing as the development of ornithological survey in Nepal is taking pace with a growing involvement of Nepalese nationals in the field (Inskipp et al. 2020). As a result, new discoveries, re-discoveries, and status and distributional updates of birds in Nepal are taking place (Inskipp et al. 2020). Following these updates, six bird species were recommended to be removed from Nepal's vagrant list by Inskipp et al. (2020). Vagrant species are those species that have been recorded less than 10 times within the country (Inskipp et al. 2020). Among these vagrant species, ashy minivet *Pericrocotus divaricatus* hereafter, AM is also one and is now considered a rare winter visitor to Nepal (Grimmett et al. 2016).

AM is a passerine bird belonging to the family of cuckoo-shrikes Le., Campephagidae (BirdLife International 2022). It is a migratory species that winters in the Indian subcontinent (Grimmett et al. 2011) and breeds in Siberia, China, Korea and Japan (Sridharan et al. 2016). The bird species is categorized as Least Concern by IUCN, however the population is in decline at a slow pace (BirdLife International 2022).

AM has grey and white colors in contrast to its colorful close species of minivet. The other similar species to AM, Swinhoe's minivet (*P. cantonensis*), is differentiated by its dark grey hind crown, tinged brown underparts and vinous-brownish breast and belly (Grimmett et al. 2011; Grimmett et al. 2016).

2 | Materials and methods

2.1 | Study area

A bird survey was carried out along the Hanumante River of Bhaktapur District (Figure 1). The river originates in the hills of Nagarkot and flows out from Muhan Pokhari area to merge with Manohara River at Jadibuti (DCC 2017). During the process, the river travels approximately 21 km distance (DCC 2017) and collects water from a catchment area of 143 km² (Sada 2012). The river holds ecological, cultural, religious and economic values (Sada 2012; Kindermann et al. 2020). However, the river is being threatened by land use change, encroachment and pollution (Bhatta & Pandey 2020).
2.2 | Bird survey

The point count method was adopted for the bird survey with fixed radius of 20 m in the point count sites (Hutto et al. 1986). At each point, the researchers observed birds for 15 minutes (Bushra et al. 2020) to study the birds along the river. The study was conducted between October 2021 and February 2022. Birds were observed with the help of binoculars (Vortex 8×42) and camera (Cannon 800D, lens 135–300 mm). A field guidebook 'Birds of Nepal' (Grimmett et al. 2016) and a bird identification mobile application 'Merlin' were used for identifying the birds. In addition, various ornithologists of Nepal were consulted to confirm the species name as Ashy Minivet showing the picture of the species.

3 | Results

During the study period, the researchers made an opportunistic sighting of one AM (Photograph 1) on 25 February 2022. The bird was spotted perching on a canopy branch of an alder tree *Alnus nepalensis* on the river bank between site 3 and site 4 at Kharipati (27.70017° N, 85.49948° E). Initially, the researchers thought the bird was a cuckoo-shrike in the Campephagidae family. Since the bird seemed different and interesting, the researchers paid more attention to confirm the species in the field; based on its shape, size, plumage, habitat and behavior. The bird was greyish with
a little black and white that left the researchers with two possible species: Ashy Minivet and Swinhoe’s Minivet. The two species can be very confusing in the field. The bill and feet of the bird were black, back grayish, underparts (breast and belly) whitish, lore and supercilium blackish, flanks dark and size was less than 20cm. The outer tail feathers were white and there was a white band across the flight feathers. It was observed in an open area with scattered trees and was foraging in the tree canopy with mixed-species and insectivorous flock. The authors also thought it could be Swinhoe’s Minivet (upperparts and underparts brown-tinged, white on forehead of male that extends to the back) but the plumage did not match with this individual. Thus, the authors assumed, AM, a rare winter visitor to Nepal (Grimmett et al. 2016) might be on a return migration to its breeding areas further north. This information helped the authors to gain confidence on the species as AM. The bird was further confirmed with the help of ornithologists of Nepal. Hence, we present the first record of the Ashy Minivet in Kathmandu Valley.

4 | Discussion

Ashy minivet is categorized as a rare winter visitor to Nepal and has been reported a few times from Koshi Tappu Wildlife Reserve (KTWR) and Sauraha, Chitwan District (Inskipp et al. 2020). The first record of Ashy Minivet for Nepal was made by Badri Chaudhary and Hathan Choudhary around KTWR in 2011 (Giri & Chaudhary 2012a). This record was followed by sightings of the species there in 2012 by Sanjib Acharya and the Koshi Bird Society team, in 2013 by Tuija Pakkanen Suikonen, in 2015, by Martin Field and in 2017 by Tek Bahadur Gurung (Inskipp et al. 2020). Besides KTWR, the species has been spotted around Sauraha in Chitwan District in 2012 by Tika Ram Giri (Giri & Chaudhary, 2012b) and in 2013 by Tek Bahadur Gurung (Inskipp et al. 2020). To our knowledge, there are no previous records of AM from Bhaktapur or from the Kathmandu Valley. Although the number of birders both as passionate observers and as researchers, have increased after the 1980s in Nepal and have led to the discovery of new species and distributional records (Inskipp et al. 2020), there are many threats to the continued existence of birds in Nepal. Habitat degradation and habitat loss triggered by anthropogenic activities and land use change are the greatest threats to birds (Grimmett et al. 2011; Inskipp et al. 2013; Baral & Inskipp 2020; WWF 2020). The study area has been experiencing growth of built up areas (Bhatta & Pandey 2020) that has risked the remaining habitat of birds. Therefore, we recommend that the green belts and patches along the river corridor should be conserved and expanded to establish a continuous green corridor along the river section to maintain bird habitats.

5 | Conclusions

The opportunistic sighting of ashy minivet by the Hanumante River in the Kathmandu Valley is a new distributional record of the species in Nepal. Despite sparse vegetation and poor water quality of the river, birds are continuing to use this habitat, but the question is how long avifauna can face the increasing anthropogenic pressure. Based on our research, we strongly recommend the establishment of a continuous green corridor along the Hanumante River to maintain good habitat for birds and also recommend ensuring better water quality for avifauna.

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Authors’ contributions

K.G. and K.R.G. designed the research, collected data and wrote the manuscript; S.M.S. helped in polishing the manuscript, and A.D. helped in collecting data. All authors contributed critically to the drafts and gave final approval for publication.

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Conflicts of interest

Authors declare no conflict of interest.

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