Asian Journal of Conservation Biology, July 2026. Vol. 15 No. 1, pp. 174–181 AJCB: FP0291/85366
ISSN 2278-7666 ©TCRP Foundation 2026 https://doi.org/10.53562/ajcb.85366

Research Article

Avifaunal diversity of local and peripheral ecosystem of two high altitude wetlands in West Sikkim, India

Nurima Subba[1], Rasmi Shova Gurung[1], Jharna Chettri[1], Harish Panchal[1,*] and Harsh Gulati[2]

[1]*Department of Zoology, Shri Ramasamy Memorial University, Sikkim-737102, India*
[2]*School of Bioengineering and Biosciences, Lovely Professional University, Punjab, India*
[*]*Corresponding Author's E-mail: harishpanchal15@gmail.com*

(Received: April 19, 2025; Revised: March 17, 2026; Accepted: March 17, 2026)

ABSTRACT

In the current investigation, the diversity, abundance, and conservation status of avian species was documented from May 2023 to August 2023 at Kathok and Khecheopalri Lake, West Sikkim, India. Data was collected using direct observation and point count method. A total of 155 birds from 22 different families and 56 species were reported at the study sites during the periodic visits. The maximum number of the species observed both at Kathok Lake (n=5) and Khecheopalri Lake (n=6) belongs to the family Leiotrichidae. Summer migrants include Verditer flycatcher and Barn swallow at Khecheopalri Lake. The Verditer flycatcher, however, was also observed as a summer visitor at Kathok Lake. For the conservation status, all the recorded species were categorized as "Least Concern" in the IUCN Red List and for the Wildlife Conservation Act, 1972, the recorded species were classified under Schedule IV. The Shannon-Weiner diversity index value was found to be 2.52 and 3.27 for Kathok Lake and Khecheopalri Lake, respectively, thus indicating the higher bird diversity at Khecheopalri lake in comparison to Kathok Lake. Consequently, an understanding of the composition and diversity of bird communities is necessary to assess the importance of local or regional landscapes for avian conservation. Further studies in different seasons mainly focusing on how seasonal interactions drive population change in different bird species, are required for better understanding and monitoring of the birds.

Key words: Birds, Conservation, Diversity, Wetlands, Kathok, Khecheopalri