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Cover: Nile Crocodile *Crocodylus niloticus* regulating body temperature on a warm day. Digital art on Procreate by © Aakanksha Komanduri.



## Recent sighting of Black Baza *Aviceda leuphotes* Dumont, 1820 (Aves: Accipitriformes: Accipitridae) in Nandhaur Wildlife Sanctuary, Uttarakhand, India

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**Abstract:** The Black Baza *Aviceda leuphotes* is a small migratory raptor of the family Accipitridae, primarily distributed across northeastern India, the eastern Himalaya, and southeastern Asia, with scattered seasonal records from peninsular and western India. Validated records from northern India remain limited. A single individual was observed on 20 December 2025 in a semi-evergreen forest-edge habitat near Chorgaliya, Uttarakhand. The identification was confirmed using diagnostic plumage characters and photographic evidence. Previous records from Maharashtra, Odisha, Tamil Nadu, and Puducherry suggest that the species exhibits broader seasonal occurrence patterns across India than previously understood. The present observation represents the first scientifically documented record of the species from the Nandhaur landscape and constitutes a notable northwestern range extension within the Indian subcontinent. The occurrence during winter further supports the possibility of seasonal dispersal or migratory movement from eastern populations. This record highlights the ecological importance of the Terai–Bhabar landscape as a potential stopover or seasonal foraging habitat for migratory raptors and emphasizes the need for long-term monitoring of avifaunal movements in the Himalayan foothills.

**Keywords:** Avifauna, Himalayan foothills, migratory raptor, northern India, passage migrant, seasonal dispersal, species distribution, Terai–Bhabar landscape.

The Black Baza *Aviceda leuphotes* is a small, stocky, pigeon-sized raptor belonging to the family Accipitridae. It is primarily distributed across the eastern Himalayas, northeastern India, southern and southeastern Asia, and parts of peninsular India, with migratory tendencies observed in several regions of its range (Ali & Ripley 1978; Ferguson-Lees & Christie 2001; Purohit et al. 2017). In India, the species is typically associated with broad-leaved evergreen forests of the Western Ghats, northeastern India, and the Andaman Islands, though sporadic and seasonal records suggest a wider distribution (Rasmussen & Anderton 2012).

Morphologically, the Black Baza is characterized by a distinctive long, spiky crest, black head and upperparts, and contrasting white and chestnut barring on the underparts. In flight, it exhibits a striking black-and-silver pattern with broad, paddle-shaped wings. Sexual dimorphism is evident, with females generally larger

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and exhibiting more prominent barring than males (Ferguson-Lees & Christie 2001; Sivakumar & Prakash 2004). Ecologically, the species is usually solitary or found in small family groups. It feeds primarily on lizards, frogs, and insects, often employing aerial sallies from canopy perches to capture prey (Ali & Ripley 1978). Due to its reliance on intact forest canopies and diverse prey availability, the Black Baza is considered an indicator of healthy forest ecosystems.

Across the Indian peninsula, the species has been recorded as a passage migrant or rare winter visitor, including regions such as the Eastern and Western Ghats, Maharashtra, and parts of eastern India (Rane & Borges 1987; Bapat & Wadatkarn 2015). Verified occurrences from Bhimashankar (Rane & Borges 1987), Vidarbha (Bapat & Wadatkarn 2015), and the Gupteswar forests of Odisha (Purohit et al. 2017) suggest a broader and more dynamic distribution pattern than previously understood (Rane & Borges 1987; Bapat & Wadatkarn 2015). Historical and recent sightings from southern India, including Chennai, Puducherry, and Kancheepuram, further support its status as a seasonal migrant in certain regions (Santharam 1981, 2009; Boobalan 2017; Nagarajan 2017).

The December 2025 bird census conducted in Nandhaur Wildlife Sanctuary represents the first scientifically documented record of the Black Baza in this landscape, thereby extending its known distribution range in northern India. The species is currently classified as Least Concern on the IUCN Red List and is protected under Schedule I of the Wildlife (Protection) Act, 1972. Although considered locally uncommon and sensitive to habitat degradation, its presence signifies good forest canopy integrity, adequate prey availability, and minimal anthropogenic disturbance, reinforcing its importance as an ecological indicator species.

## METHODS

The study was conducted in the Nandhaur Wildlife Sanctuary, established in 2012, located in the Terai–Bhabar landscape of Uttarakhand, India (Mehra 2015). The sanctuary extends between 79.675°–80.009° E & 29.138°–29.184° N and is bounded by the Gola River in the west and the Sharda River on the eastern side, providing connectivity with Shuklaphanta National Park. It forms a part of the Terai Arc Landscape (TAL). The vegetation is primarily tropical moist deciduous forest dominated by *Shorea robusta*, along with associated species such as *Terminalia tomentosa* and *Adina cordifolia* (Champion & Seth, 1968). The sanctuary covers approximately 270 km<sup>2</sup> and comprises four ranges: Nandhaur, Jaulasal, Danda,

and Sharda, with perennial rivers such as Nandhaur and Kalaunia and several seasonal streams.

Field observations were carried out through systematic visual surveys during early morning and mid-afternoon across forest clearings, canopy zones, and edges. The Black Baza was identified based on distinctive plumage, crest, and flight characteristics (Purohit et al., 2017). Line transect and point count methods were employed, with notable sightings supported by photographic documentation and GPS coordinates, following standard ornithological protocols (Bapat & Wadatkarn 2015).

Birds were primarily observed with binoculars (Olympus 8 × 40, Nikon 12 × 48, Nikon 8 × 25), while distances and perch heights were estimated using a Nikon Forestry Pro II Laser Rangefinder. Geographical coordinates of all sightings were recorded using a Garmin eTrex 30x GPS device. Species verification and record-keeping were supported by the Merlin Bird ID and eBird mobile applications. Photographs were captured using Nikon and Canon cameras, and plumage identification was cross-referenced with a standard field guide Grimmett et al. (2011).

## RESULTS

On 20 December 2025 at 1407 h, during the bird census in Nandhaur Wildlife Sanctuary, a single Black Baza was observed foraging above the forest canopy in a mixed deciduous forest-edge patch near Chorgaliya in the Haldwani Forest Division (29°07'52"N, 79°42'19"E ; elevation ~350 m) (Figure 1; Table.1). The bird was seen soaring briefly above the canopy before making short aerial movements, suggestive of active foraging behaviour. The individual was identified based on distinct morphological features, including black upperparts, prominent crest, and contrasting white markings on the flight feathers (Image 1). The underwing pattern and overall flight silhouette were consistent with descriptions provided by Purohit et al. (2017) and Bapat & Wadatkarn (2015), confirming the species as Black Baza. The habitat comprised semi-evergreen forest with a mosaic of dense canopy and open woodland patches. The bird remained in the area for a short duration before flying deeper into the forest and was not relocated during subsequent observations. No evidence of nesting or breeding behaviour was recorded during the survey period.

## DISCUSSION

The confirmed sighting of a Black Baza *Aviceda leuphotes* in Nandhaur Wildlife Sanctuary on 20 December 2025 represents the first scientifically

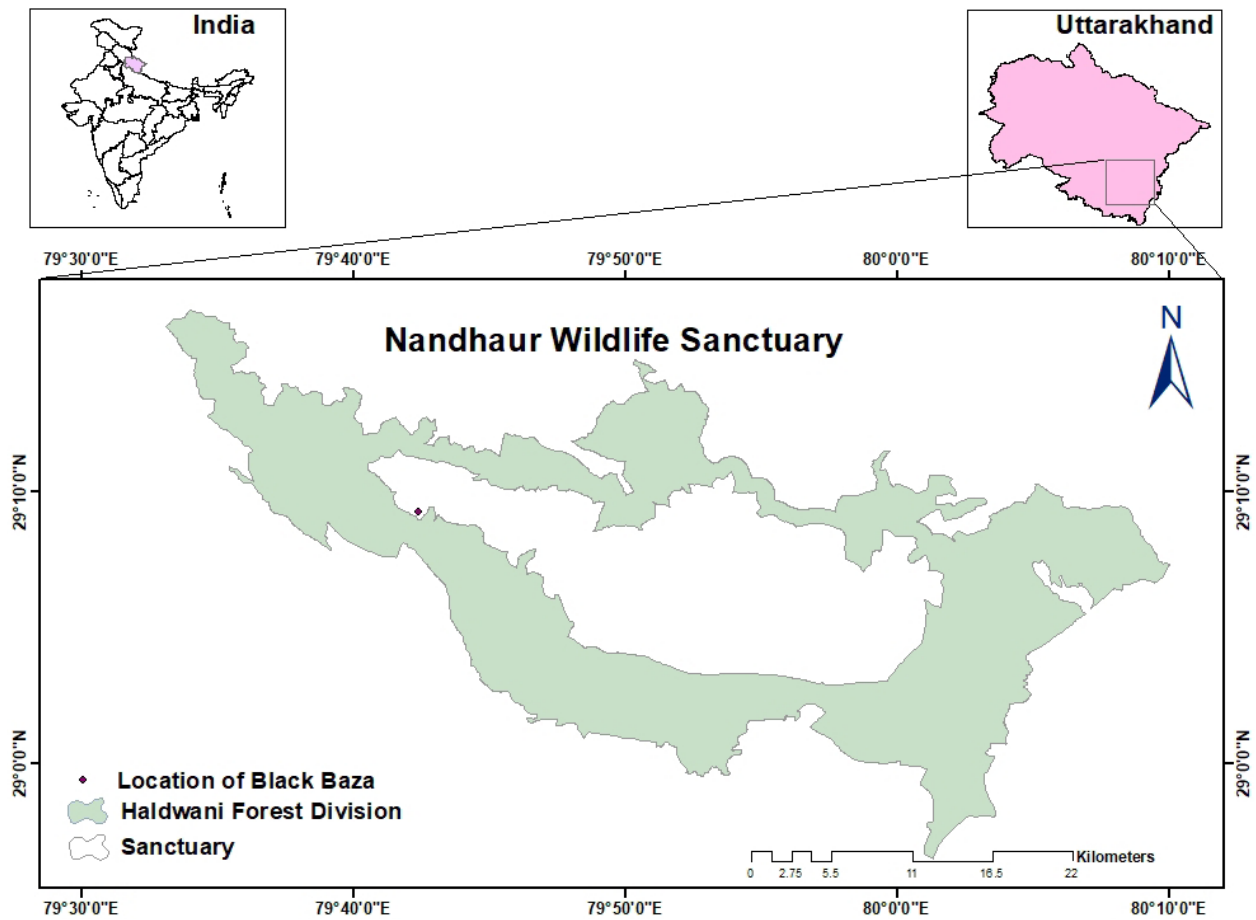


Figure 1. The map outlining the Haldwani Forest Division and Nandhaur Wildlife Sanctuary (NWS), Uttarakhand, India. The purple dot shows the location of the Black Baza observation.

Table 1. Selected published records of Black Baza from western, peninsular, and eastern India.

Location	State	Season / Month	No. of Individuals	Remarks	Source
Bhimashankar	Maharashtra	October	1	Passage / seasonal sighting	Rane & Borges (1987)
Vidarbha	Maharashtra	Winter	1	First regional record	Bapat & Wadatkar (2015)
Gupteswar Forest	Odisha	November	2	Forest-associated occurrence	Purohit et al. (2017)
Chennai	Tamil Nadu	October–December	Multiple sightings	Seasonal migrant	Santharam (2009)
Puducherry	Puducherry	Winter	1	Migratory observation	Boobalan (2017)
Kancheepuram	Tamil Nadu	Winter	1	Seasonal occurrence	Nagarajan (2017)
Nandhaur Wildlife Sanctuary	Uttarakhand	December	1	First documented record from the Terai–Bhabar landscape	Present study

documented record of this species in the northern Terai–Bhabar landscape of Uttarakhand. This observation expands the known distribution of the species in India, and adds to the growing number of scattered records from western and peninsular regions outside its core distribution range in northeastern India and

southeastern Asia.

Published observations from Bhimashankar in Maharashtra (Rane & Borges 1987), Vidarbha (Bapat & Wadatkar 2015), Gupteswar forests of Odisha (Purohit et al. 2017), and southern India including Chennai, Puducherry, and Kancheepuram (Santharam 1981,



**Image 1. a & B—Black Baza captured in Nandhaur Wildlife Sanctuary, Uttarakhand, India.**

2009; Boobalan 2017; Nagarajan 2017) indicate that Black Baza occurs sporadically across different parts of the Indian peninsula. Notably, many of these records are concentrated during post-monsoon and winter months, suggesting that at least some populations undertake seasonal movements or dispersal. The December record from Nandhaur Wildlife Sanctuary is consistent with this broader temporal pattern and may represent part of a wider migratory or passage movement from eastern populations.

Across its primary range in northeastern India and southeastern Asia, the Black Baza is known to exhibit migratory behaviour, with seasonal local movements

have been reported in response to prey availability and climatic conditions (Ferguson-Lees & Christie 2001; Rasmussen & Anderton 2012). In this context, the present observation may represent an occasional dispersing or migratory individual moving westward from eastern populations. Alternatively, the increasing number of scattered observations from different parts of India may indicate that the species is more widespread than currently understood but remains overlooked because of its elusive behaviour, short seasonal occurrence, and resemblance in flight to other small raptors. Although the available evidence is insufficient to confirm residency in Uttarakhand, repeated surveys

and long-term monitoring may help determine whether the species occurs regularly as a passage migrant or seasonal visitor in the Himalayan foothills.

The habitat in which the bird was observed, comprising semi-evergreen and mixed deciduous forest with relatively intact canopy structure, corresponds well with the species' known habitat preferences. The observed aerial sallies above the canopy are also consistent with its documented feeding ecology, which includes the capture of insects and small vertebrates during short foraging flights (Ali & Ripley 1978; Purohit et al. 2017). The absence of breeding or nesting evidence during the survey suggests that the individual was likely transient rather than resident.

The present record also has conservation relevance. If Black Baza occurs in the region primarily as a migrant or passage visitor, then Nandhaur Wildlife Sanctuary may function as an important stopover or seasonal foraging habitat within the Terai–Bhabar landscape. Conversely, if future observations indicate repeated or prolonged occurrence, the area could hold greater significance for sustaining a previously overlooked local population. In either case, the sighting highlights the ecological value of intact forest habitats in the Himalayan foothills and underscores the importance of continued avifaunal monitoring in the Terai Arc Landscape.

## REFERENCES

- Ali, S. & S.D. Ripley (1978). *Handbook of the Birds of India and Pakistan, Volume 1, Divers to Hawks, 2<sup>nd</sup> Edition*. Oxford University Press, Bombay, 384 pp.
- Bapat, G. & J.S. Wadtkar (2015). First report of Black Baza *Aviceda leuphotes* from Vidarbha region, Maharashtra, India. *Journal of the Bombay Natural History Society* 112(2): 123–126. <https://www.bnhsjournal.in/index.php/bnhs/article/view/104933>
- Boobalan, S. (2017). eBirdchecklist: <https://ebird.org/ebird/india/view/checklist/S33434930>. eBird: an online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. <http://www.ebird.org>. Accessed on 11.iv.2026.
- Champion, H.G. & S.K. Seth (1968). *A Revised Survey of the Forest Types of India*. Manager of Publication, Government of India, New Delhi, 404 pp.
- Ferguson-Lees, J. & D. Christie (2001). *Raptors of the World*. Houghton Mifflin Harcourt, New York, 992 pp.
- Grimmett, R., C. Inskipp & T. Inskipp (2011). *Birds of the Indian Subcontinent, 2<sup>nd</sup> Edition*. Oxford University Press, 528 pp.
- Mehra, S. (2015). *Management plan of Nandhaur Wildlife Sanctuary (2015–2016 to 2024–2025)*. Haldwani, Uttarakhand: Western Circle Haldwani, Uttarakhand Forest Department.
- Nagarajan, V.M. (2017). eBirdchecklist: <https://ebird.org/ebird/india/view/checklist/S40125784>. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: <http://www.ebird.org>. Accessed on 11.iv.2026.
- Purohit, S., M.V. Nair & S.K. Palita (2017). On the occurrence of Black Baza *Aviceda leuphotes* Dumont, 1820 (Aves: Falconiformes: Accipitridae) in the Gupteswar forests of the Eastern Ghats, Odisha, India. *Journal of Threatened Taxa* 9(11): 10964–10967. <https://doi.org/10.11609/jott.2761.9.11.10964-10967>
- Rane, U. & R. Borges (1987). Sighting of the Blackcrested Baza *Aviceda leuphotes* at Bhimashankar, India. *Journal of the Bombay Natural History Society* 84(3): 679. <https://www.biodiversitylibrary.org/part/167539>
- Rasmussen, P.C. & J.C. Anderton (2012). *Birds of South Asia: The Ripley Guide, Volume 2, 2<sup>nd</sup> Edition*. Smithsonian Institution and Lynx Editions, Washington, D.C. and Barcelona.
- Santharam, V. (1981). Some new records from Madras City. *Newsletter for Birdwatchers* 21(3–4): 4–8.
- Santharam, V. (2009). The Black Baza *Aviceda leuphotes* in Chennai: a review of sight records. *Indian Birds* 5(1): 19–20.
- Sivakumar, S. & V. Prakash (2004). Sexual dimorphism in Black Baza *Aviceda leuphotes*. *Forktail* 20: 139.



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