

authors observed a single individual of Himalayan Rubythroat *Calliope pectoralis*. The bird was photographed, and its identity was confirmed based on its distinct plumage and morphological characteristics [56]. This sighting represents the first confirmed record of the species in Jharkhand.



56. Himalayan Rubythroat, Massanjore, Jharkhand.

The Himalayan Rubythroat is a striking passerine known for its bright red throat and distinctive vocalizations. It primarily inhabits alpine meadows and dwarf shrub thickets at elevations between 2,600–4,000 m asl, breeding across the high-altitude regions of the Himalaya, Pamirs, Tien Shan, and adjacent ranges (Collar & Christie 2020). It descends to lower altitudes during winter, occupying dense scrub, tea gardens, and grasslands along the Himalayan foothills (Collar & Christie 2020). Non-breeding populations are commonly documented in northern and central Himalayan states (Grimmett et al. 2011).

The bird observed in Massanjore exhibited the deep red chin and upper throat characteristic of Himalayan Rubythroat, with uniformly grey upper parts and a prominent white supercilium. These features distinguish it from the closely related Chinese Rubythroat *C. tschebaiewi*, which has a broader red throat patch separated from a white submoustachial stripe by a narrow black malar stripe (del Hoyo et al. 2020). Similarly, the Siberian Rubythroat *C. calliope* has a metallic, pale ruby-red chin and throat, bordered below by a blackish line that links the malar area, with an olive-brown back and a bold white supercilium and submoustachial stripe (Collar 2020). Based on these diagnostic characteristics, the authors confidently identify the bird as a Himalayan Rubythroat.

Massanjore is situated in north-eastern Jharkhand, and it lies within the Chota Nagpur Plateau, a region characterized by undulating terrain, shallow valleys, and a network of small streams and rivers. The habitat comprises dry deciduous forests, open scrubland, and moist, mixed deciduous forest patches. The Massanjore Reservoir, located on the Mayurakshi River, enhances habitat diversity, supporting a wide range of flora and fauna. This unique ecological setting provides a diverse array of microhabitats suitable for various resident and migratory species.

This sighting is a significant ornithological record, as no historical specimens or previous observations exist from the state of Jharkhand. While this species is commonly recorded in northern and central Himalayan states, such as Uttarakhand and Himachal Pradesh, its presence in Jharkhand has not been documented previously (Grimmett et al. 2011; SolB 2023). However, a few wintering records exist from Purulia and Howrah Districts in adjacent West Bengal (Nandy 2019). Additionally, sightings from

central India, extending to Maharashtra, suggest potential long-distance migratory capabilities (eBird 2025). Given the limited ornithological surveys conducted in Jharkhand, it is plausible that other montane and migratory species remain undocumented in the region. This record highlights the importance of systematic avifaunal surveys and long-term monitoring efforts to better understand species distributions within the state.

The authors sincerely thank Arkajyoti Mukherjee, Satwik Vyas, Kanad Baidya, and Ashwin Viswanathan for confirming the identification and contributing to this document.

## References

- Collar, N., 2020. Siberian Rubythroat (*Calliope calliope*), version 1.0. In *Birds of the World* (J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.sibrub.01>
- Collar, N., & Christie, D. A., 2020. Himalayan Rubythroat (*Calliope pectoralis*), version 1.0. In *Birds of the World* (J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.himrub.1.01>
- del Hoyo, J., Collar, N., & Christie, D. A., 2020. Chinese Rubythroat (*Calliope tschebaiewi*), version 1.0. In *Birds of the World* (J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.chirub.1.01>
- eBird, 2025. Species range map: Himalayan Rubythroat. Website URL: <https://ebird.org/species/himrub1/IN-WB-PU> [Accessed on 21 October 2024]
- Grimmett, R., Inskipp, C., & Inskipp, T., 2011. *Birds of the Indian Subcontinent*. 2nd ed. London: Oxford University Press & Christopher Helm. Pp. 1–528
- Nandy, S., 2019. Himalayan Rubythroat *Calliope pectoralis* in southern Bengal. *Indian BIRDS* 15(2): 61–62
- SolB, 2023. State of India's Birds factsheet: Himalayan Rubythroat *Calliope pectoralis*. Website URL: <https://stateofindiabirds.in/species/himrub1/> [Accessed on 21 October 2024].

– Prasenjit Chowdhury, Banideep Sinha & Manish Kumar Chattopadhyay

Prasenjit Chowdhury, Jalpaiguri Government Engineering College, Jalpaiguri, 735102, Jalpaiguri, West Bengal, India

Banideep Sinha, Suri Vidyasagar College, Burdwan University, Suri, 731101, Birbhum, West Bengal, India

Manish Kumar Chattopadhyay, Maulana Abul Kalam Azad University of Technology, Kolkata, 7000064, West Bengal, India. E-mail: [manish.ee22@gmail.com](mailto:manish.ee22@gmail.com) [Corresponding author]

## Displaying Lesser Floricans *Sypheotides indicus* in the arid Desert National Park, Rajasthan, India

The Lesser Florican *Sypheotides indicus* is the smallest of the four bustards found in India and is endemic to India, Pakistan and Nepal. Listed as Critically Endangered by the IUCN (BirdLife International 2021), it is a specialist of semi-arid agro-grassland and has faced a catastrophic decline over the last three generations (Dutta et al. 2018). Lesser Florican distribution spans the semi-arid and sub-humid bioclimatic regions in India. The species migrates to north-western India to breed and known historical breeding records are from southern and western Gujarat, southern and eastern Rajasthan, and western and southern Madhya Pradesh (Sankaran et al. 1992). The breeding range once extended further west, to the southern Sindh region of Pakistan, but the species is thought to be possibly extinct there (BirdLife International 2021). The last survey in 2017 estimated their population to comprise 426 (174–805)<sup>1</sup> breeding males (~800 individuals) across its distribution range with one of the two large breeding populations found in the Ajmer landscape of Rajasthan with an estimated 110–136 breeding males (Dutta et al. 2018). This decline is primarily attributed to agricultural conversion and mismanagement of grasslands compounded by other factors such as historical hunting, egg collection, high

<sup>1</sup> This is expressed as mean and 95% confidence interval

livestock grazing intensity, and development of infrastructure and mining projects in their habitat (Dutta et al. 2018). The species is a local migrant in the country but their ranging patterns and basic ecology are poorly known. To date, it has not been reported from anywhere in the Desert National Park (hereinafter, DNP) from the arid zone of Thar desert in eastern Rajasthan.

A male Lesser Florican was sighted in the Sudasari enclosure of DNP on 02 July 2024. On 12 July 2024, a male in full breeding plumage was seen displaying within the same enclosure (26.723°N, 70.606°E) [57, 58]. On the next day, two males were seen displaying at the same location. We heard both of them displaying on the subsequent day as well. The last sighting was a male in breeding plumage on 28 July 2024. All sightings were within a c.60 ha area inside the Sudasari enclosure of DNP.

The birds were easily identified as male Lesser Floricans by their characteristic courtship display where they leapt up to 2m in the air, rapidly beating their wings and paddling their legs after which they swiftly fell back to the ground with their wings and legs tucked in. Simultaneously they emitted a frog-like rattle from the friction of their primaries that has been recorded to be heard up to ~300 m away (Sankaran & Rahmani 1986). The areas where they were seen had a mosaic of short (30cm tall) and tall grasses (30–60cm) with few *Capparis decidua* (1–2m) and *Zizyphus nummularia* shrubs (1–2m).



57. A male Lesser Florican inside Sudasari ACD, Desert NP on 12 July 2024.



58. A male Lesser Florican performing courtship display inside Sudasari ACD, Desert NP on 12 July 2024.

BOTH: Shimontika Gupta

Its arrival in Rajasthan is marked by the onset of the southwest monsoon and it has been recorded in the districts of Ajmer, Bhilwara, Shahpura, Kekri, Tonk, Pali, and Pratapgarh (Bharadwaj et al. 2011; Vyas & Sharma 2013; Dutta et al. 2018). In the early breeding season of 2023, a female florican tagged by the Wildlife Institute of India (WII), migrated from the non-breeding areas in southern India up to Balesar in the Jodhpur District of Rajasthan before moving to Gujarat (Uddin & Dutta unpublished data). However, it is unknown if there was any breeding activity in this area. Hence, this marks the first record of the species in DNP and the westernmost record of the species in Rajasthan (Sankaran et al. 1992; Rahmani & Soni 1997; Anoop et al. 2017). The closest recorded breeding area of the florican from here is c.300 km away in the Pali District of Rajasthan (Sankaran et al. 1992).

The DNP, officially a Wildlife Sanctuary, is a 3,162 sq. km area in the Thar Desert spanning the Jaisalmer and Barmer districts of Rajasthan. In the Thar Desert, rainfall is low and erratic, varying between 100–450 mm in a year and drought occurs every two to three years (Rao et al. 2012). This landscape is majorly characterized by dry open grasslands, some of the last remaining extensive grasslands in the country (Rahmani & Soni 1997). Within the DNP, there are around 88 villages with a population of over 49,000 people who are dependent on the land for livelihoods, mainly through agriculture and livestock rearing (Anoop et al. 2017). With the development of the Indira Gandhi canal, there has been a rapid increase in cultivation resulting in large-scale conversion of grasslands into croplands in some areas outside of DNP. Growing livestock populations have further led to a reduction in pastures, intensifying grazing pressures. To combat this issue, a major focus of management of the DNP has been the establishment of inviolate enclosed areas to allow the restoration of degraded grasslands (Anoop et al. 2017). Today, these protected grasslands, covering c.170 sq. km in total, support significant biodiversity and are used extensively by the Critically Endangered Great Indian Bustard *Ardeotis nigriceps*.

The habitat within these enclosures is characterized by good grass cover and subsequently higher insect abundance along with minimal grazing and human disturbance. Sudasari, a 15 sq. km enclosure within DNP, is one of the oldest enclosures and forms one of the primary breeding grounds for the only viable population of the Great Indian Bustard (Dutta et al. 2024). These grassland enclosures are an ideal habitat for meeting the breeding requirements of the Lesser Florican. Grasslands form their primary breeding grounds with moderately high grass biomass and consequently low grazing pressure, and remoteness from settlements being important predictors of their density (Dutta & Jhala 2014). Within grasslands, male breeding territories have been found to have more heterogeneous ground vegetation, possibly to meet their various life-history needs (Dutta et al. 2018). There are records of breeding activity in lightly wooded grasslands/savannas, and the species is found more frequently in croplands (structurally similar to grasslands) when grasslands are either intensively grazed or the grass is too tall (>1.5m) as a result of heavy rainfall (Sankaran 1997). The dispersal and movement of the Lesser Florican are strongly influenced by the distribution and amount of rainfall with its arrival in breeding areas dependent on high rainfall and good grass cover (Vyas & Sharma 2013). Additionally, Lesser Floricans are known to show unpredictable movements and males are more detectable



due to their aerial courtship displays during monsoon (breeding season), whereas females are highly cryptic but have been found to nest typically around male display territories (pers. obsv. MU). It is possible that the male floricans followed the southwest monsoon to DNP as the area received its first heavy rainfall (~140mm) the week prior to the first sighting. Finding a suitable habitat, the males stayed for about a month and even began performing courtship displays. It is yet to be determined if environmental conditions are suitable for these birds to continue breeding activity here. This region exhibits much more arid conditions than the rest of its range. Earlier studies have shown that if rainfall is interspersed with long spells of dry and sunny days, the birds abandon their territories for better breeding sites (Vyas & Sharma 2013). However, this record of Lesser Florican from an arid area outside its known range indicates that with active habitat restoration, such opportunistic species might be able to expand their range and exploit additional suitable areas for breeding. Thus, this finding has important conservation implications in the wake of erratic rainfalls that are mediated by climate change (Ratnam et al. 2016) and the global decline of biodiversity in grassland ecosystems.

The fieldwork leading to this article has been funded by the National Compensatory Afforestation Fund Management and Planning Authority (CAMPA) Authority under the Bustard Recovery Program, a joint initiative of the WII, Rajasthan Forest Department (RFD), and the Ministry of Environment, Forest and Climate Change (MoEFCC). We thank the administrative authorities of the WII, RFD, and MoEFCC for providing necessary logistic, field permission, and funding support for this work. We also thank the researchers and field assistants of the Bustard Recovery Program team based at Jaisalmer for their overall support and contribution to fieldwork.

## References

- Anoop, K. R., Bhardwaj, G. S., & Shekhawat, R. S., 2017. *Management Plan for Desert National Park Wildlife Sanctuary (Plan Period: 2017-2027)*. Rajasthan Forest Department.
- Bhardwaj, G.S., Sivakumar, K. & Jhala, Y.V., 2011. *Status, distribution and conservation perspectives of Lesser Florican in the North-Western India: A Survey Report*. Wildlife Institute of India.
- BirdLife International, 2021. *Sypheotides indicus*. The IUCN Red List of Threatened Species 2021: e.T22692024A199959007. <https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T22692024A199959007.en>. [Accessed on 26 September 2024.]
- Dutta, S., & Jhala, Y., 2014. Planning agriculture based on land use responses of threatened semiarid grassland species in India. *Biological Conservation* 175: 129–139.
- Dutta, S., Karkaria, T., Bipin, C. M., Uddin, M., Kher, V., Sharma, H., Joshi, H., Bishnoi, V., Sonika, C. K., Paul, I., Gupta, T., Supakar, S., Nagar, A., Pati, A., Gupta, S., Purohit, N., Lawrence, S., Jangid, A. K., Gujjar, M., Moitra, M., Bhattacharya, S., Sawant, M., Krishna, M., Sakhlani, P., Kawnli, L., Kolipakam, V., & Qureshi, Q., 2024. *Bustard Recovery Program: Annual Progress Report 2023-24*. Wildlife Institute of India, Dehradun.
- Dutta, S., Narwade, S., Bipin, C. M., Gadhave, D. Uddin, M., Mhaskar, M., Pandey, D., Mohan, A., Sharma, H., Iyer, S., Tripathi, R., Verma, V., Varma, V., Jangid, A., Chakdar, B., Karulkar, A., Lambture, B., Khongsai, N., Kumar, S., Gore, K., Jhala, D., Vaidya, N., Horne, B., Chittora, A., Annigeri, B. S., Trivedi, M., & Jhala, Y. V., 2018. *Status of the Lesser Florican Sypheotides indicus and implications for its conservation*. Wildlife Institute of India, Dehradun. Pp: 1–112.
- Islam, M. Z. U. & Rahmani, A. R., 2011. Thar Desert, Rajasthan, India: anthropogenic influence on biodiversity and grasslands. *Biodiversity* 12 (2): 75–89.
- Rahmani, A. R., & Soni, R., 1997. Avifaunal changes in the Indian Thar Desert. *Journal of Arid Environments* 36 (4): 687–703. <https://doi.org/10.1006/jare.1996.0242>
- Rao, A. S., Poonia, S., & Choudhary, S., 2012. Climate change projections and impacts on Thar desert ecosystem. *Annals of plant and soil research* 14 (2): 87–94.
- Ratnam, J., Tomlinson, K.W., Rasquinha, D. N. & Sankaran, M., 2016. Savannas of Asia: antiquity, biogeography, and an uncertain future. *Philosophical Transactions of the Royal Society B: Biological Sciences* 371 (1703): 20150305.
- Sankaran, R., 1997. Habitat use by the Lesser Florican. *Journal of the Bombay Natural History Society* 94(1): 40–47.
- Sankaran, R., & Rahmani, A. R., 1986. Intra- and inter-specific behaviour of the Lesser Florican. Study of ecology of certain endangered species of wildlife and their habitats. Annual Report I. 1984-85. Bombay: BNHS.
- Sankaran, R., Rahmani, A. R., & Ganguli-Lachungpa, U., 1992. The distribution and status of the Lesser Florican *Sypheotides indica* (JF Miller) in the Indian subcontinent. *Journal of the Bombay Natural History Society* 89 (2): 156–179.
- Vyas, R., & Sharma, B. K., 2013. Distribution, Status and Conservation of Lesser Florican *Sypheotides indicus* in Rajasthan. In *Faunal Heritage of Rajasthan, India: General Background and Ecology of Vertebrates*: 347–356.
- Shimontika Gupta, Mohib Uddin, Swapna Lawrence, Sadar, Ashish Vyas, Sutirtha Dutta
- Shimontika Gupta, Wildlife Institute of India, Dehradun, Uttarakhand, India. E-mail: [shimontikagupta@gmail.com](mailto:shimontikagupta@gmail.com) [Corresponding author] [SG]
- Mohib Uddin, Wildlife Institute of India, Dehradun, Uttarakhand, India. E-mail: [mohibuddin2065@gmail.com](mailto:mohibuddin2065@gmail.com)
- Swapna Lawrence, Wildlife Institute of India, Dehradun, Uttarakhand, India. E-mail: [swap.lawrence@gmail.com](mailto:swap.lawrence@gmail.com)
- Sadar, Bustard Recovery Program, Sam, Rajasthan, India. E-mail: [sadarkhan792@gmail.com](mailto:sadarkhan792@gmail.com)
- Ashish Vyas, Divisional Forest Officer, Desert National Park, Rajasthan, India. E-mail: [ashishvyas.optics@gmail.com](mailto:ashishvyas.optics@gmail.com)
- Sutirtha Dutta, Wildlife Institute of India, Dehradun, Uttarakhand, India. E-mail: [sutirthadutta@gmail.com](mailto:sutirthadutta@gmail.com)

## An Oriental Bay-Owl *Phodilus badius* rescued from Valmiki Tiger Reserve, West Champaran, Bihar, India

The Oriental Bay-Owl *Phodilus badius* is widely, but sparsely, distributed across South and South-east Asia (Bruce et al. 2020). It is scarce throughout the north-eastern hill states of India, the eastern Himalaya, and is a resident of semi-evergreen, and evergreen forests (Praveen 2025). It is strictly nocturnal in habits, and found in low densities. Its secretive nature had contributed to its status as one of India's little-known owls (Ali & Ripley 1987). It occurs from northern Bengal and Sikkim through Bhutan, Arunachal Pradesh, lowland Assam, and all north-eastern hill states except Manipur, where it might surely occur, but has not been reported yet (Ray et al. 2020; Praveen 2025). I document the first record of Oriental Bay-Owl from Bihar, India.

On the evening of 01 December 2022, an apparently exhausted Oriental Bay-Owl was rescued from bamboo thickets from Vijaypur Karmabari village (27.420°N, 83.909°E) on fringes of Valmiki Tiger Reserve, West Champaran District, Bihar by villagers along with the staff of Bihar Forest Department. It was subsequently released into forest after some treatment (Rarity\* 2022).

The incident was published in a local newspaper in Hindi which read:

*"An owl of rare variety was seen by local people in a bamboo thicket in Vijaypur Karmabari village near fringes of Valmiki Tiger Reserve as being attacked by crows. Local people rescued it and later on officials from the forest department took the bird on 01 December 2022 (same day) from Vijaypur Karmabari. It underwent treatment and was released in Valmikinagar range of Valmiki Tiger Reserve"* (translated text)

The identity of the bird as to an Oriental Bay-Owl was straightforward; the image depicted in the newspaper had the characteristic white face with short crest, chestnut wings and whitish underparts. It was not an Eastern Barn Owl *Tyto javanica* or an Eastern Grass-Owl *T. longimembris*; two species that are commonly confused as this species. The bird was not identified