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Passage migration through Kachchh district in Gujarat: Insights from two years of systematic monitoring (2022-2023)

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Abstract

Every year, India plays temporarily hosts to a special group of birds called passage migrants. Such birds neither visit during the summer nor the winter but pass through India during autumn and spring while migrating from their breeding grounds in Central and East Asia to their wintering grounds in Africa. Gujarat and Rajasthan are hubs of passage migration, with potentially hundreds of thousands of birds passing through from August to October to capitalize on available food in a landscape that's lush and full of insects after the rains. The Passage Migrant Count is a systematic citizen science initiative started in September 2022 in the Kachchh district of Gujarat to understand the region's magnitude and ecological correlation of passage migration. Over 100 birdwatchers participated during each of the two years. Results revealed the extrapolated presence of over three lakh passage migrants in the region on September 10-11, 2022, and over five lakh birds on September 24-25, 2023. Most species were present in greater numbers in 2023. With more than three lakh estimated individuals, European Roller *Coracias garrulus*) was the most abundant passage migrant in 2023, followed by Spotted Flycatcher *Muscicapa striata*) with over one lakh individuals. Several other interesting insights have emerged from the counts, including the understanding that the different species have different habitat preferences when present in the region.

Introduction

India is not just a critical winter destination for migratory birds but may also be an important 'stopover region' for birds that need to refuel during long migratory journeys (Chernetsov et al., 2007; Kumar & Alam, 2023). Birds that briefly stopover in the country during migration are called passage migrants. Passage migration in India is most pronounced during the period from August to October in northwestern India when birds from Central and East Asia pass through on their way to Africa (Chernetsov et al., 2007). Passage migration is particularly numerous in the Rajasthan desert and Kachchh in Gujarat because the region's strategic location on the migratory route between Eurasia and Africa makes it an ideal stopover for birds seeking temporary refuge and sustenance during their long journeys.

Photo: Sunanda Vinayachandran

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Photo: Ramesh Shenai

Gujarat, in particular, presents a unique opportunity to observe intricate patterns of avian migration due to its diverse landscape. Over eight species of passage migrants are documented to regularly stopover in this region, including European Roller *Coracias garrulus*), Red-backed Shrike *Lanius collurio*), Red-tailed Shrike *Lanius phoenicuroides*), Spotted Flycatcher *Muscicapa striata*), Rufous-tailed Scrub-Robin *Cercotrichas galactotes*), Greater Whitethroat *Curruca communis*), Common Cuckoo *Cuculus canorus*) and Blue-cheeked Bee-eater *Merops persicus*) (Praveen et al., 2023).

Despite a long history of bird monitoring in India (e.g., Asian Waterbird Census), passage migrants have largely been overlooked. We do not have a sense of the numbers or the abundance trends of passage migrant populations that move through India. Such knowledge can inform conservation action in India and play an important role in supporting global population assessments of these species. To address this gap in knowledge and lay the foundation for systematic monitoring of passage migrants in India, Bird Conservation Society Gujarat (BCSG) and Bird Count India (BCI) partnered to start the Passage Migrant Count in Kachchh, Gujarat, in 2022.

Passage Migrant Count (PMC) was designed to be an annual or bi-annual survey conducted by volunteer birdwatchers using a systematic scientific protocol. This article outlines what was learned during the first two years of the PMC.

Methods

PMC is a volunteer-driven citizen science initiative (Bird Count India 2023). A call for volunteers was put out a few months in advance in both years so there would be enough participants to survey the entire landscape for passage migrants. Participants were divided into teams of 2-4 birdwatchers, and a team always included at least one experienced birdwatcher and others who could use the opportunity to learn and gain experience. The survey design differed slightly during the two years.

In 2022, 250+ survey points were randomly identified across the landscape so that the entire Kachchh landscape (except the inaccessible white Rann) was uniformly represented. Points were then assigned to teams so that each team could base themselves at a convenient location to reach these points. A team was then expected to make a single 'travelling' eBird checklist at each point assigned to them by walking 500m on each side. 104 birdwatchers in 26 teams surveyed the landscape on Sep 10-11, 2022, and created a total of 254 'complete' eBird checklists (Fig. 1).

In 2023, the protocol was improved, so teams were assigned grids rather than survey points. A team was expected to make a single 1 km long travelling checklist inside every assigned grid, ensuring they remained inside the grid throughout. During 2022, many points were not accessible, prompting this

change. 100 birdwatchers in 34 teams surveyed the landscape on Sep 24-25, 2023, and created a total of 224 'complete' eBird checklists (Fig. 1).

For analyses, we considered each taluka as a geographically meaningful region but combined a few regions (Fig. 2). The large Greater Rann of Kachchh and Little Rann of Kachchh region were not considered because they were outside the reasonable logistic scope of the count. Red-tailed Shrike was excluded from all analyses due to identification difficulties.

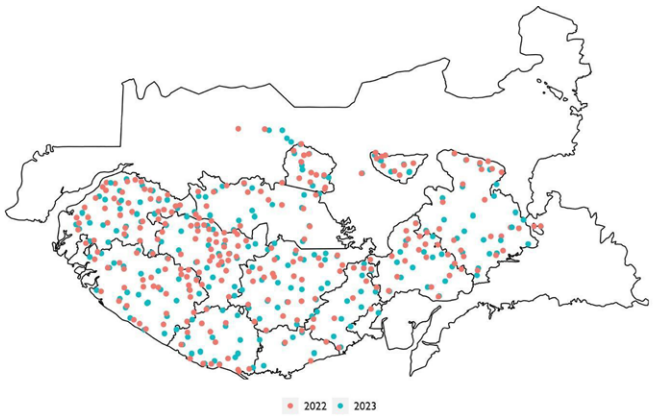

Fig. 1: Sampling locations across the Kachchh district in both years.

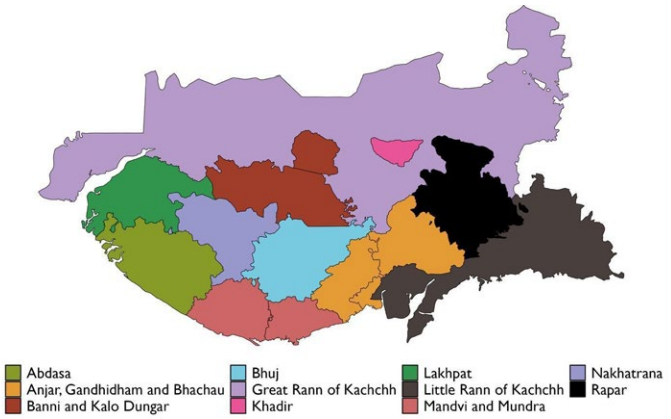

Fig. 2: Combined regions in Kachchh.

For each species, we calculated the mean count and frequency of reporting (number of lists with a species/total unique lists) in each region. Counts were standardized across the years to 1 km of distance travelled using a conversion factor that scaled according to the mean distance travelled in the checklists uploaded during that year (a consequence of the changed protocol). Assuming that counts were made up to 500m on each side of a transect, we estimated the mean count of each species per sq. km. in each region. We also used

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similar logic to estimate the total number of passage migrants present in each region (by extrapolating to the total area of each region), the total extrapolated number of each passage migrant species, and the total number of passage migrants present in Kachchh during the count. Blue-cheeked Bee-eater *Merops persicus* was excluded from region-wide and across-species extrapolations due to their nature of occurring in sparse but large aggregation

Results

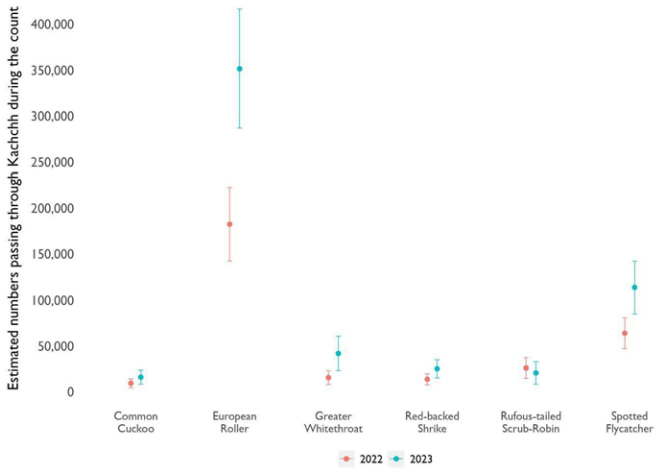

Fig. 3: Extrapolated abundance of each passage migrant species in 2022 and 2023.

We estimated that a total of 568,612 ± 75,278 (95% CI) passage migrants [excluding Blue-cheeked Bee-eater *Merops persicus*] were present in Kachchh on September 24-25, 2023 (Table 1, Fig. 3). On September 10-11, 2022, the estimated number was lower at 312,362 ± 46,207. The European Roller *Coracias garrulus* and Spotted Flycatcher *Muscicapa striata* were the most abundant species, with over 300,000 and 100,000 birds estimated to be in passage, respectively. Both were considerably more numerous in 2023. Rufous-tailed Scrub-Robin *Cercotrichas galactotes* and Greater Whitethroat *Curruca communis* were the next most numerous, with over 15,000 birds estimated to be in passage in the landscape.

We found that passage migrants were more heterogeneous in their landscape use in 2022 compared to 2023 (Fig. 4).

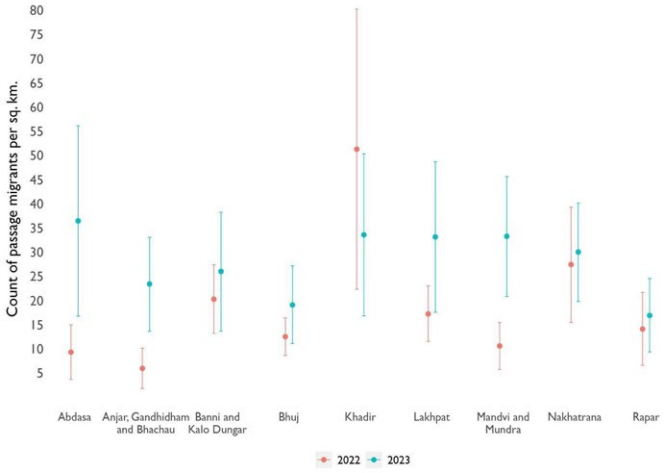

Fig. 4: Extrapolated abundance of passage migrant species in each region in 2022 and 2023.

Despite the relative homogeneity of passage migrant presence across the regions in 2023, different species seemed to have different favoured regions (although the differences balanced out). European Roller *Coracias garrulus* was fairly widespread in the landscape but most numerous in Abdasa and Nakhatrana in 2023 (Fig. 5). On the other hand, Spotted Flycatcher *Muscicapa striata* was most abundant in the southern regions (Fig. 6).

Table 1: Estimated numbers (with associated 95% confidence intervals) of each species and, in total, to pass through Kachchh district on the survey days in 2022 and 2023.

Species	Count 2022	Count 2023
European Roller	182, 470 ± 40,067	351, 620 ± 64, 674
Spotted Flycatcher	63, 932 ± 16, 751	113, 465 ± 28, 703
Rufous-tailed Scrub-Robin	25, 992 ± 11, 295	41, 886 ± 18, 734
Greater Whitethroat	15, 446 ± 7, 510	25, 096 ± 9, 943
Red-backed Shrike	13, 603 ± 5, 995	20, 587 ± 12, 285
Common Cuckoo	9, 310 ± 4, 913	15, 959 ± 7, 717
All passage migrants	312, 362 ± 46, 207	568, 612 ± 75, 278

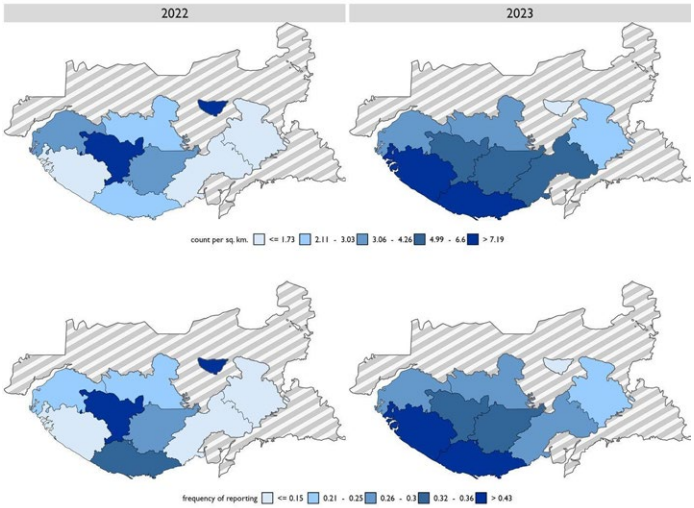

Fig. 5: European Roller *Coracias garrulus* presence in the different regions in Kachchh.

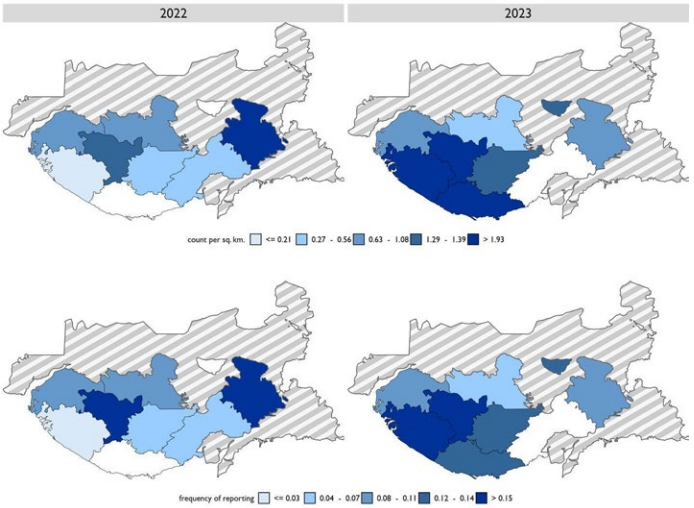

Fig. 7: Greater Whitethroat *Curruca communis* presence in the different regions in Kachchh.

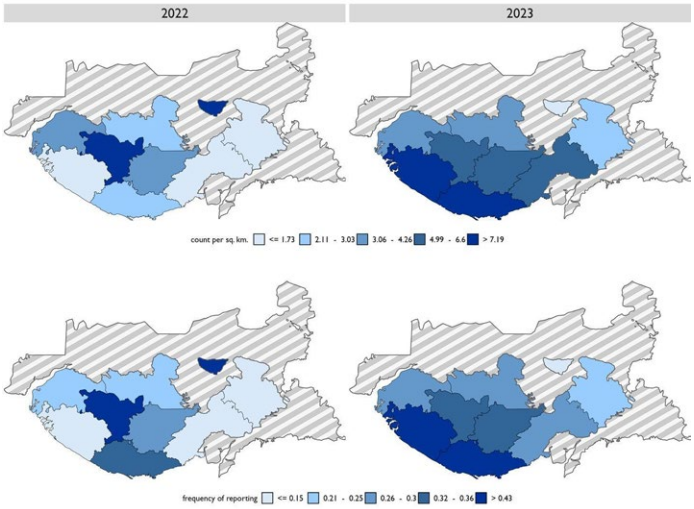

Fig. 6: Spotted Flycatcher *Muscicapa striata* presence in the different regions in Kachchh.

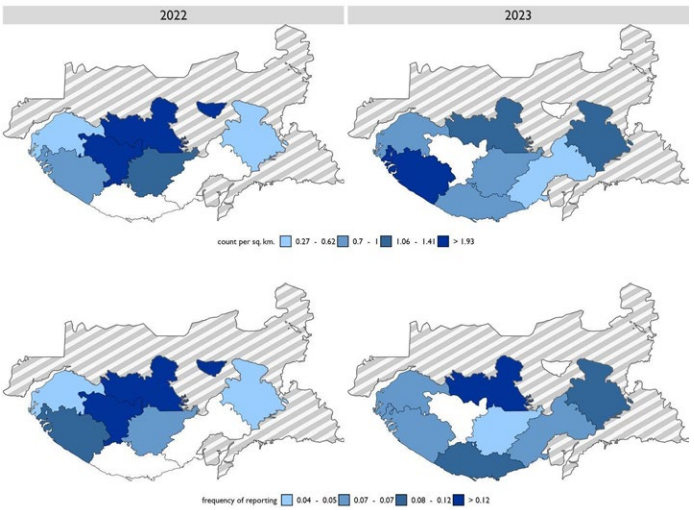

Fig. 8: Rufous-tailed Scrub-Robin *Cercotrichas galactotes* presence in the different regions in Kachchh.

Greater Whitethroat *Curruca communis* and Rufous-tailed Scrub-Robin *Cercotrichas galactotes* were present in entirely different regions during both the years (Fig. 7-8). Greater Whitethroat *Curruca communis* was most numerous in the eastern parts of the region in 2022 but was most numerous in the southwestern parts in 2023. Similarly, Rufous-tailed Scrub-Robin *Cercotrichas galactotes* was most abundant in the thorn forest regions of Nakhatrana, Banni, and Khadir in 2022 and was absent in the southern parts, whereas not a single bird was detected in Nakhatrana in 2023 and there were birds present in the south.

During both years, the Blue-cheeked Bee-eater *Merops persicus* was only present in the open landscapes of the eastern regions in Kachchh (Fig. 9).

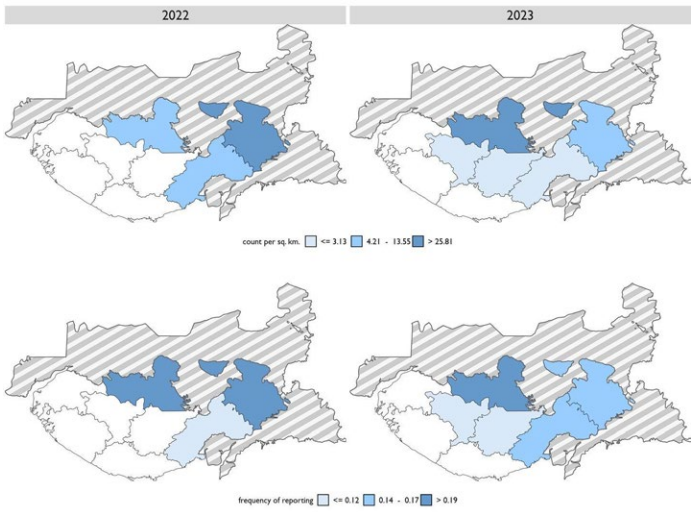

Fig. 9: Blue-cheeked Bee-eater *Merops persicus* presence in the different regions in Kachchh.

In addition to the passage migrants themselves, a few more passage migrants through the region were detected, including Brown Shrike *Lanius cristatus*, European Nightjar *Caprimulgus europaeus*, Indian Spotted Eagle *Clanga hastata*, Common Grasshopper Warbler *Locustella naevia* and Blyth's Pipit *Anthus godlewskii*.

Conclusion

The systematic nature of Passage Migrant Count has enabled the first numeric assessments of passage migrants moving through the Kachchh district of Gujarat, providing a vital baseline. We found many differences between habitat use in 2022 and 2023, but this might be because the dates were two weeks apart or because of certain weather conditions associated with either or both surveys. Some species, like Blue-cheeked Bee-eater *Merops persicus*, favoured open landscapes adjacent to the Rann; others, like Rufous-tailed Scrub-Robin *Cercotrichas galactotes*, favoured thorn forests. To truly understand these patterns, surveys may be required multiple times a season and over a long term. Programmes such as these play an important role in involving the public in scientific monitoring while also showcasing the beauty of the landscape and must continue to be a participatory survey in the years to come (Bonney et al., 2009, 2014; Dickinson et al., 2010).

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Evaluation of eBird data for Long-tailed Shrike *Lanius schach* and Bay-backed Shrike *Lanius vittatus* from Gujarat: a case study

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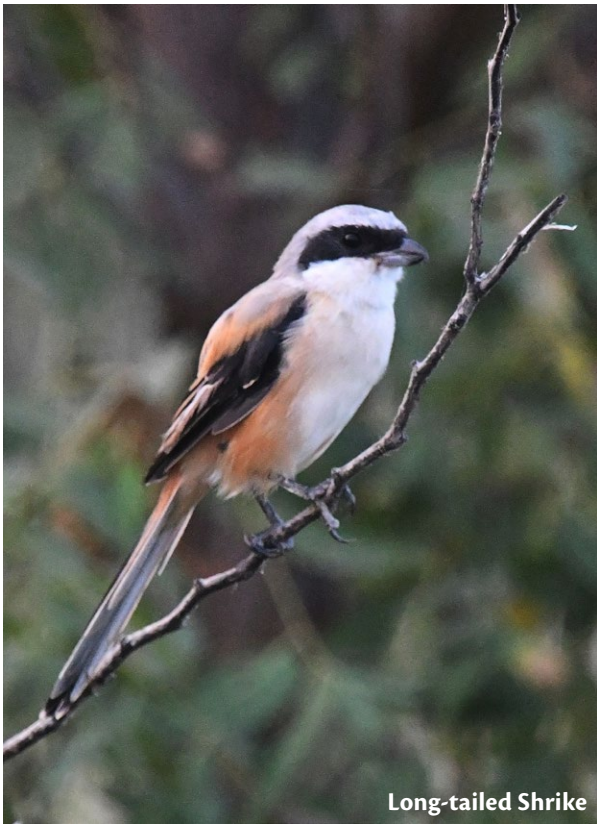

Photos: Prasad Ganpule

'The Bay-backed Shrike depicted here is not a full adult; note that the mask above the eye is not broad across the forehead, and such birds can be easily mistaken for Long-tailed Shrikes. But note the different structure (especially the longer tail in Long-tailed Shrike) and plumage (large white primary patch and darker chestnut-maroon mantle in Bay-backed Shrike). Identification in such cases remains tricky.

Introduction

Citizen science projects like 'eBird' (www.eBird.org) are fast gaining popularity in India. eBird is now one of India's most widely used citizen science databases and is also popular with bird watchers in Gujarat. More than 122000 checklists are now submitted by more than 5000 eBird users for Gujarat (eBird 2024). This database is a very useful source of information and is used in several ways. For example, eBird data was used to assess the conservation status of most species occurring in India in the 'State of India's Birds' report, wherein more than 30 million observations formed the basis of the analyses (SoIB 2023). The data from eBird is also used to assess the distribution of bird species; the winter distribution of Forest Wagtail *Dendronanthus indicus* in India was assessed based mainly on sightings reported on eBird (Kannan et al. 2018). The eBird website lists over 930 publications (https://science.ebird.org/en/research-and-conservation/publications), highlighting how eBird data is used. However, since it is a citizen science project, whether the data is reliable and accurate must be verified. A critical assessment of reported records/observations from time to time can shed more light on the accuracy of the data posted on eBird.

Here, I evaluate the records of two resident shrike species, the Long-tailed Shrike *Lanius schach* and the Bay-backed Shrike *Lanius vittatus* from Gujarat.

Material and methods

I collected photographic reports of Long-tailed Shrikes and Bay-backed Shrikes posted on eBird from Gujarat till 28 May 2024. There are 460 photographs of Long-tailed Shrike and 657 photographs of Bay-backed Shrike on eBird until this date. Only confirmed sightings were selected. This data was then exported onto an Excel spreadsheet. Since multiple photographs of the same individual were on many checklists, the data was filtered, and the number of checklists submitted was obtained. Every checklist with more than one photograph was scrutinised to see whether more than one individual was photographed. Since most checklists

Table 1: Details of identification of Long-tailed Shrike and Bay-backed Shrike on eBird from Gujarat

	No. of photographs	No. of checklists	No. of individuals	No. of misidentifications	No. of correct identifications	Percentage of correct identification
Long-tailed Shrike	460	324	336	26	310	92.20%
Bay-backed Shrike	657	397	415	28	387	93.25%

had only one photograph, it was relatively easy to check all the individual checklists with multiple photographs. When more than one bird was present in the photos, each such bird was added to the total number of birds. It was not checked whether there was a duplication of records, i.e. whether the same bird was photographed more than once on different dates from the same area. The counts in the checklists were ignored, and only the photographs posted on each checklist were seen. All photographs were checked for identification, and the number of misidentified birds was counted. If a photograph was too poor to check for correct identification, then the bird present in such a photo was counted as misidentified; the number of such poor photos was very low (only a total of one or two in each species). I did not check if the same observer had made multiple mistakes in identification, and only the total number of misidentified birds was counted.

Results

I found that 310 out of 336 individuals of Long-tailed Shrike were correctly identified, and 387 out of 415 individuals of Bay-backed Shrike were correctly identified. Therefore, the identification accuracy was 92.20% in Long-tailed Shrike and 93.25% in Bay-backed Shrike. See Table 1 for details.

It was interesting to note that most of the misidentifications were reciprocal; the Long-tailed Shrike was misidentified as a Bay-backed Shrike and vice versa. The most extreme identification mistake was a prinia species misidentified as a shrike. Other misidentifications were Red-backed Shrike *Lanius collurio* and Brown Shrike *Lanius cristatus* misidentified as Bay-backed Shrike or Long-tailed Shrike. Some Bay-backed Shrikes, which were in moult and difficult to identify, were correctly identified. Some of the identification errors were in identifying juveniles. But, the overall skill in identifying these species was quite good. There is an option to use a slash – Bay-backed/Long-tailed Shrike – in eBird if a user is unsure of the identification. However, no photographs have been posted in this category.

Though my analysis was focused on identification errors, the data bias in the distribution of the Bay-backed Shrike and Long-tailed Shrike in Gujarat was evident from this eBird data. Though both these species are widespread and can be frequently found in suitable habitats all over the state, there are a few parts of the state from which there are no records or only some records in eBird. Further, there are a disproportionate number of records from 'hotspots'. This can be easily explained since more bird watchers visit these hotspots and upload their sightings while some of the interior parts of the state are not visited. However, this creates a situation where it would seem that these species are not present in some parts of the state. The fact is that these species occur in these areas, but this is not seen in the eBird data. Hence, the spatial (location) bias is a problem, and wider coverage is needed from bird watchers to get a correct distribution of these species.

Discussion

Checking the data on eBird showed that the misidentifications were 7.8% in Long-tailed Shrike and 6.75% in Bay-backed Shrikes in the state. The review system in eBird is based on filters which flag unusual sightings or large counts. These flagged sightings are then subjected to expert review. eBird users can also flag wrong identifications from public outputs. In the case of the Long-tailed Shrike and the Bay-backed Shrike, both these species are common in Gujarat, and hence, the filters do not flag reports of these species and only unusual counts are flagged. One or two birds of these species being reported would not be flagged since the filters are set considering the status and distribution of these species in Gujarat.

I am one of the eBird reviewers for Gujarat and have been associated with eBird as a reviewer since 2014. While reviewers and other birdwatchers try their best to keep the data accurate, the sheer volume of data in eBird makes it very difficult to maintain the accuracy of the data. Reviewers will look into and correct these identification errors for Long-tailed Shrike and Bay-backed Shrike in due course. However, new records will be added; correcting misidentified birds is a continuous process.

If there are only occasional errors in the data, then the impact of such errors may be negligible when this data is used in different analyses. However, it is well known that in similar-looking species, the errors in identifications are higher, meaning that the error rate increases when birds co-occur

and appear similar (Hull et al. 2010). If there are abundant and systematic identification errors, problems arise (Costa et al. 2015). It is well known that there are data biases in eBird; see Tang et al. (2021) for modelling spatially biased citizen science efforts. Similarly, Jhonston et al. (2019) suggest best practices for making reliable inferences from citizen science data to estimate species distributions. Ramesh et al. (2017) and Praveen (2017) discuss the sampling and spatial bias in species distribution and home ranges. In some cases, the misidentifications can bias the phenological estimates; Gorleri & Areta (2022) found that phenological estimates for two hard-to-identify *Elaenia* flycatchers in South America were biased due to a large number of misidentifications between these species. The Kerala Bird Atlas 2015-2020 used statistical methods to minimise temporal, spatial or taxonomic bias but recognised that some difficult-to-identify species pairs like Green Warbler *Phylloscopus nitidus* / Greenish Warbler *Phylloscopus trochiloides* were likely to be misidentified. Their solution was to merge the records into a single taxon; Greenish Warbler records were considered to be of Green Warbler (doi: 10.18520/cs/v122/i3/298-309). Similarly, SoIB (2023) combined records of 17 species pairs, which were considered hard to identify; in this case, Green Warbler records were merged into Greenish Warbler!

Since eBird data is now widely used, its reliability and accuracy should be periodically checked. The misidentifications in these two shrike species were less than 10% in checked photographs. In this case, to inexperienced birders, both species are similar in appearance, so the chances of making mistakes in identification are higher. The error percentage for those sightings that did not have photographs is impossible to check, but it can be assumed to be generally less than 10% based on the examined photographic data and assuming a similar error rate. The error percentages may be lower in easier-to-identify species. Conversely, likely, the error percentages in difficult-to-identify species like *Aquila* eagles, *Phylloscopus* and *Iduna* warblers, Pipit species, and many other groups would be higher. Smart filters may be able to catch the errors, but identification remains challenging in many species, even from photographs.

It should be noted that this is only a rudimentary analysis of two shrike species from Gujarat. This analysis can be further refined by checking if an observer had made repeated mistakes in identification or whether the errors were evenly distributed across observers. It would be interesting to see whether the error percentage is similar if the data for the whole country is checked; there are 13915 photographs of Long-tailed Shrike and 7670 photographs of Bay-backed Shrike from India till 31 May 2024 and checking all the photographs for correct identification would be a herculean task! But it might be easier to do it state-wise and see if there are similar or better results. Similar species can be selected, and the identification errors in such species pairs can be analysed to determine the reliability of eBird data for difficult-to-identify species. More complex analyses to identify errors can be undertaken on a wider scale to evaluate the accuracy and reliability of eBird data.

The bigger issue is whether the data from eBird would give correct outputs if there are identification errors on a large scale and what would be the best way to tackle such errors. What is the percentage of error after which the data would generate biased outputs? What would be the best way to minimise and correct identification errors? These are some of the questions which need more studies. Since eBird data is used in trends analysis, species distribution, conservation applications, population estimates and other related fields, it becomes imperative to check whether the data is reliable and accurate. Different statistical models may be useful in mitigating identification errors, and the data's accuracy can be improved by imparting basic identification skills to beginners and regular evaluation of photographic records by a dedicated team of reviewers.

Conclusion

This is a first-of-its-kind study on evaluating photographic data from eBird in India. The identification accuracy for both Long-tailed Shrike and Bay-backed Shrike was more than 90% based on photographs, but identification of both these species is challenging and results in misidentifications. Maintaining the accuracy and reliability of eBird data is difficult due to the volume of the data being added almost daily. Regular reviews of photographs of confusing species posted on eBird are recommended. Further, it is crucial to check for large-scale errors in identifying some species and take corrective measures before the data is used in various analyses. More studies on data evaluation of similar-looking species from India need to be initiated.

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Sighting of Chestnut-winged Cuckoo *Clamator coromandus* at Vansda National Park – A second record for the State

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Photo: Dharmesh Patel

On the morning of March 26th 2024, I was on a birding trip in the Bharadi area of Vansda National Park (20°46'05.7"N 73°28'10.0"E). Around 8 am, I observed a bird with reddish wings flying across the trail and perching on a bamboo branch. Initially, I considered it might be a Greater Coucal *Centropus senensis* due to its colours. But it appeared a bit smaller and to me, against the light, it resembled a Jacobin Cuckoo *Clamator acobinus*. However, upon reviewing my photographs, I concluded it as a Chestnut-winged Cuckoo *Clamator coromandus*. The bird remained perched for a few seconds before flying into the dense canopy. Additionally, I had spotted nearly 10 Forest Wagtails *Dendronanthus indicus*, in the vicinity.

Upon searching eBird database, I found no prior records of the Chestnut-winged Cuckoo in Gujarat. However, Mr. Ashok Mashru, a senior birdwatcher, informed me that this sighting is significant as it represents the second record of this species in Gujarat. The first sighting was documented by Prashant Desai on July 10th 2005 in Vapi, and the note was published in the Flamingo newsletter (Desai 2005). According to 'Field Guide to the Birds of Gujarat' (Ganpule 2022), status of Chestnut-winged Cuckoo in Gujarat is listed as 'vagrant' and there is only a single record in the state. This makes my observation particularly noteworthy, as it marks the bird's vagrant visit to the state after nearly two decades.

The Chestnut-winged Cuckoo is distinguished by its striking reddish-brown wings and a slender built. It is known to

migrate in India and is typically found in forested areas during winter. The sighting at Vansda National Park adds significant data to Gujarat's bird distribution records. This cuckoo is an impressive bird, known for its distinctive appearance and striking plumage. In the field, this species can be identified by its vibrant chestnut wings and a long, graduated tail that gives it an elegant profile in flight. It has a dark, glossy black head, neck and upperparts, contrasting sharply with its white underparts. One of the most notable features is its prominent crest, which adds to its unique silhouette. Typically found in dense forests and well-wooded areas, the Chestnut-winged Cuckoo is known to forage actively for insects, often perching conspicuously as it scans for prey. Its elusive nature and striking colouration make it a prized sighting for birdwatchers.

The reappearance of the Chestnut-winged Cuckoo in Gujarat after such a long interval raises queries about changes in the bird's migratory patterns and habitat preferences. Vansda National Park, with its mixed forest types, provides a suitable environment for many migratory birds, suggesting that similar habitats might support more vagrant species.

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Sighting of Orange-breasted Green Pigeon *Treron bicinctus* in South Gujarat

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Photo: Rajarshi Uttambhai Gangurde

As a native of Dang district, on February 25th 2024, at around 09:30 hours, I was birdwatching at a roadside area between Jamalpada and Mahal road (20°52'01.9"N, 73°40'19.4"E) in Dang. I spotted a small bird in the canopy and waited for it to reappear on a branch for a clear view, but another movement distracted my attention. A green pigeon was walking along the branch, and as it turned towards the light, I clearly saw its orange coloured breast, confirming it as the Orange-breasted Green Pigeon *Treron bicictus*. The bird moved along the branch for few minutes before settling. It remained there for about 15 minutes. During this time, I managed to take several clear photographs. The bird made no sound. I searched nearby trees for other individuals or a flock but found none. This area of Jamalpada is located on the edge of Purna Wildlife Sanctuary. For confirmation, the photographs were shared with a few birding experts at the Department of Zoology, Gujarat University. 'A Field Guide to the Birds of Gujarat' (Ganpule 2022) was also referred for confirming the identification. The morphological description matched the photographs, showing yellowish-green underparts with a band of lilac across the upper breast, followed by orange on the lower breast. The under tail-coverts were cinnamon, edged with pale yellow on the outer and longest feathers. The tail was slaty grey above with a broad blackish sub-terminal band (except on the central pair of rectrices) and black below with a grey tip (Ali & Ripley, 1983).

As per information provided by the range forest officer of the Gujarat forest department, Dang district encompasses tropical moist deciduous forest and includes the northern part of the Sahyadri mountain range, which forms part of the Western Ghats. Orange-breasted Green Pigeon, known to inhabit the Himalayas, as well as the hills of India, Bangladesh, and Sri Lanka (Grimmett et al., 2011), exhibits gregarious behaviour, frugivorous diet and arboreal habits, similar to other green pigeon species. These birds are commonly found in evergreen and moist deciduous environments (Ali & Ripley, 983).

The abundance of various ficus species, particularly the Gular fig *Ficus glomerata*, provides a staple food source for numerous bird species, including pigeons. After observing the forest area for six months, I noted a significant presence of Gular fig trees in Dang forest, which supports a diverse bird population. Consequently, the combination of habitat

suitability and resource availability increases the chances of the sightings of Orange-breasted Green Pigeon in this region.

The first photographic sighting of Orange-breasted Green Pigeon was from Gir National Park (Dave 2020). According to the Checklist of Birds of Gujarat (Ganpule 2020) one sighting of Orange-breasted Green Pigeon is shown as 'Vagrant' to Gujarat. A Fieldguide to the Birds of Gujarat (Ganpule 2022) has shown a solitary record of the species in Gir (Gujarat). In the Checklist of Birds of Surat-Dangs (Jambu and Patel 2021), this bird is not listed. Therefore, this sighting marks the second record of the species in Gujarat.

I was fortunate to spot the bird by positioning myself right under the tree, which provided a clear view. The leaves of the tree displayed shades of yellow, orange, and green, which likely made it difficult to spot the bird due to its excellent camouflage. This camouflage is perhaps why the bird had not been sighted previously in densely canopied forest areas like in Dang.

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I extend my gratitude to my seniors, Rhidham Dave and Priyesh Kumar, for their invaluable guidance throughout the process of writing this paper. I also express my sincere appreciation to the authors and fellow birders whose information and data greatly contributed to my research and facilitated the writing of this paper. Lastly, I express my profound gratitude to nature for continually offering opportunities to discover and learn something new.

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Sighting of the Fulvous Whistling Duck *Dendrocygna bicolor* in Surat

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Photo: Vijayendra Desai

With my friends, Dr Neha and Kashyap Jariwala, I went for bird photography in the surrounding area of Damka village near Surat, on April 19th 2024. During this outing, I identified a different kind of duck, which was recognized as the Fulvous Whistling Duck *Dendrocygna bicolor*.

Fulvous Whistling Duck is a rich caramel coloured duck with a long neck and legs. It has blue-grey legs and bill and prominent pale/white stripes in the flanks. In flight, it has all dark wings and is usually found in flocks in marshes, marshy ponds and flooded rice fields. The species is active day and night and frequently gives whistled calls (eBird 2024). This sighting is notable for several reasons. Fulvous Whistling Duck is a vagrant to Gujarat (Ganpule 2016).

Salim Ali did not record the species in Gujarat but included it based on Palin's sighting from Kachchh (Ali 1954). The first photographic record of the species from Gujarat was from Timbi Lake, Vadodara, in April 2019 (Naria et al. 2019). Besides this, no more sightings have been observed from Gujarat on the eBird platform (eBird 2024). Geographically, the nearest sighting with photographic evidence is from Pedda Cheruvu, Rudrur, Nizamabad County, Telangana, from January 2022 (eBird 2022).

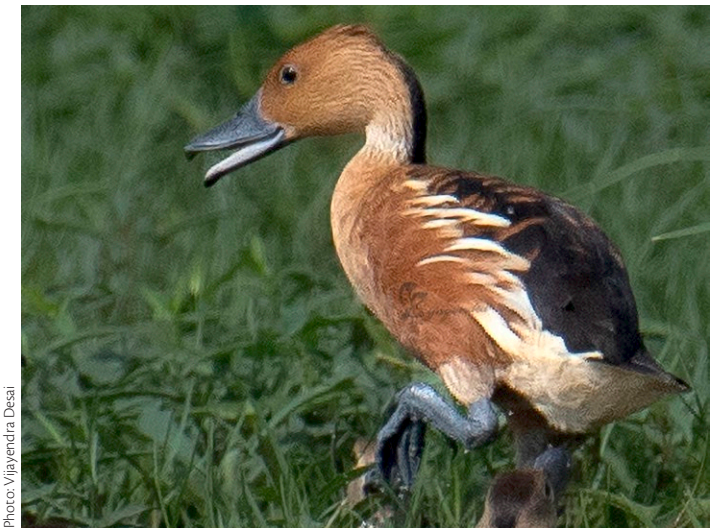

Photo: Vijayendra Desai

This species migrates long distances for suitable habitat (Naria et al. 2019). Its appearance for the untrained eyes may resemble that of the Lesser Whistling Duck *Dendrocygna javanica*, which also occurs in a similar habitat. We request birders to look for this species in the flocks of Lesser Whistling Ducks. The current sighting of Fulvous Whistling Duck is the second photographic record from Gujarat; hence, it is worth reporting. [*On May 26th 2024, Devvratsinh Mori visited the area and made a remarkable observation. To his surprise, he spotted eight individuals amidst a flock of Lesser Whistling Ducks. This is an impressive number for the region - pers. commu.*]

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Occurrence of the White-tailed Eagle *Haliaeetus albicilla* at Thol Bird Sanctuary: A third photographic record from Gujarat

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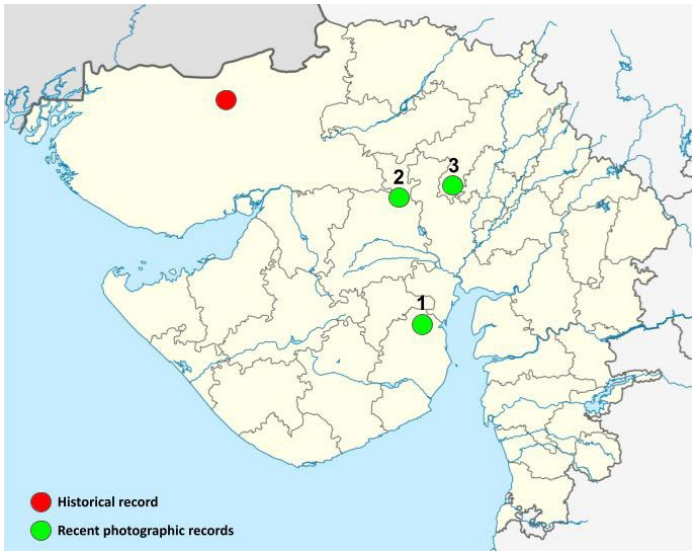
Photo: Rohit Tibrewal

Introduction

The White-tailed Eagle *Haliaeetus albicilla* is a winter visitor to the Indian Subcontinent and is considered 'generally rare' in the region, shows isolated records for India; there have been sporadic occurrences, primarily in the sub-Himalayan regions extending to Assam, with isolated reports from other areas, including the peninsula (Grimmett 2011, Rasmussen & Anderton 2012). Recent sightings have also been reported in Rajasthan, Maharashtra, and Madhya Pradesh (Khan 2015; Dudhe 2018). Additionally, isolated photographic records from various regions of India, such as Rajasthan, Maharashtra, Madhya Pradesh, West Bengal, Assam, Delhi, Jammu and Kashmir, Haryana, and Himachal Pradesh have been documented with photographic evidence posted on eBird. These records indicate an increasing presence of the White-tailed Eagle in India (eBird 2024).

The White-tailed Eagle can be confused with other large raptors, such as those in the Aquila genus and Pallas's Fish Eagle *Haliaeetus leucoryphus*. However, it can be distinguished by its substantial size, short wedge-shaped tail, prominent head and neck and robust bill. Unlike *Aquila* species, White-tailed Eagle also has largely bare, yellow tarsi. Adult White-tailed Eagles are notable for their pale heads and large yellow bills, while immatures and juveniles have darker heads and necks with streaked or blotched underparts (Forsman, 1999). The birds observed at Velavadar and in the outskirts of Nal Sarovar appear to be juvenile, identifiable by extensive white mottling on its mantle and breast and a regular pattern on its upper wing coverts, characteristic of a 2 or 2.5 year old individual (Forsman, 1999). Similarly, sightings in Rajasthan have been predominantly immature or juvenile eagles, although adults have been documented in Northeast India (Mondal & Maheshwaran, 2016).



Previous Records in Gujarat

A historical observation for Gujarat is recorded by M. K. Himmatsinhji near Khavda and Mundra, Kachchh, during 1949-1950, represents the sole historical instance of this species in Gujarat (Himmatsinhji, 1970: Naoroji, 2006). Consequently, two notable photographic records of the White-tailed Eagle in Gujarat exist. The first documented sighting occurred in 2018 at Black Buck National Park, where a juvenile individual was observed and photographed by birdwatchers (Bhatt, 2018). The second significant sighting was recorded in 2020 at Bhaskarpara Wetland, further corroborating the species' sporadic presence in the region (Magiawala, 2021). These sightings, although infrequent, are pivotal in understanding the species' distribution in the Indian subcontinent. In Gujarat, this species is considered a vagrant, with isolated records reported from different parts of the state (Ganpule 2022).

Photo: Rohit Tibrewal

The sighting at Thol Bird Sanctuary marks the third photographic record of the White-tailed Eagle in Gujarat. Thol Lake is a critical habitat for a diverse range of migratory and resident bird species, highlighting the sanctuary's importance as a stopover point for rare and endangered avian species (Grimmett, Inskipp & Inskipp, 2011). The documentation of

this sighting adds to the growing knowledge regarding the presence and movement patterns of this rare raptor in India.

[Map 1] Map showing sightings of White-tailed Eagle across the state. The red circle indicates historical records from the Kachchh region, and the Green circles indicate recent photographic records from different districts of Gujarat: 1. Black Buck National Park, Velavadar, Bhavnagar district. 2 Bhaskarpara near Nal Sarovar Bird Sanctuary, Surendranagar district. 3. Thol Bird Sanctuary, Mahesana district.

Observation

Throughout the winter season, I have been regularly exploring the vicinity of Thol Lake (23° 22' 30" N, 72° 37' 30" E), visiting three days a week. On February 13th 2024, while surveying the area, I observed a large raptor from a distance, initially mistaking it for an Imperial Eagle *Aquila heliaca*. As I attempted to approach the bird stealthily from behind the bushes, it noticed me and flew away. Fortunately, I managed to capture a few photographs before it disappeared. Upon closer examination of the images through my camera's viewfinder, I realized this was not an Imperial Eagle but some unfamiliar species. After consulting with avian experts, the bird was identified as an immature White-tailed Eagle. The same evening, I revisited the site with my wife and found the eagle again. It was perched on a neem tree. Aware of the bird's apparent wariness, I took photographs from a distance to avoid disturbing it. The bird remained for a while before being startled by a passing motorbike horn, causing it to relocate to another neem tree further away. On the morning of February 14th 2024, I observed the eagle again from a distance but chose not to approach. The bird might have used Thol Lake as a temporary resting spot during its migration, as it was not seen after that. The presence of the White-tailed Eagle in such an unexpected location underscores the ecological significance of Thol Lake as a potential migratory stopover. For Gujarat, this sighting is significant as it marks the third photographic record of the White-tailed Eagle in the state. The eagle's presence at Thol Bird Sanctuary was observed over nearly two days; the above mentioned few sightings suggest it may remain in suitable habitats for extended periods during the winter months. This sighting is crucial for validating the species' occurrence in Gujarat and enhances our understanding of its distribution within the region.

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I thank Devvratsinh Mori for his invaluable assistance in drafting this report.

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Sighting of Lesser Frigatebird *Frigata ariel* near Porbandar

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Photo: R. B. Modhvadia

On July 3, 2024, I was on patrol duty in Vishavada round, Porbandar, with my staff. We were walking along a sandy beach from Shikotar-mata temple to Ratdi. At around 6:30 pm, I saw a large bird flying overhead. I had never seen such a bird before; it looked different. A brief description of this bird is as follows: A large black-and-white bird with a longer tail, white belly, longer bill with a downcurved tip, a black head, and black underwings. It was hovering there for a few minutes. I did not have a camera at that time; however, I managed to record a decent photo with my iPhone. I shared the same with my birder friend, Ramde Bhatiya. He replied that this was a frigatebird species. I forwarded the photo to Prasad Ganpule for confirmation. He confirmed that this was a Lesser Frigatebird *Frigata ariel*.

This species is Vagrant in Gujarat with only two previous records (Ganpule 2022). One injured bird was recovered near Tapi river, South Gujarat and was reported in publication 'Chatak', a newsletter of WWF, Rajkot Div. (Ganpule 2016). A single bird was seen and photographed near Mahuva by Batuk Bhil and Mahendra Bhil (Bhil 2021). So this is the third sighting of this pelagic species from Gujarat.

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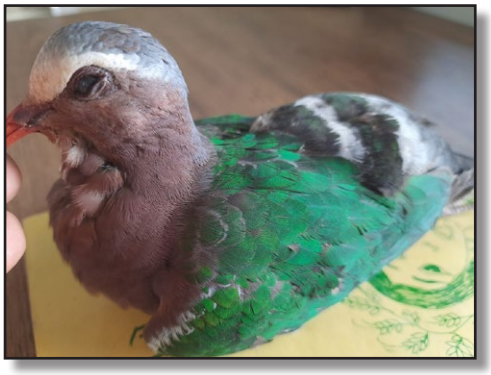
Short Birding Notes



Injured Asian Emerald Dove *Chalcophaps indica* Found in the Hilly Terrain of South Gujarat

On 15 February 2024, I was with my students at Gunjan Kanya Vidyalaya, Girnara, (Ta. Kaprada, in Valsad). This place is near the Gujarat-Maharashtra border. We found a dead specimen of a coloured bird. Initially, I thought of Yellow-footed Green Pigeon *Treron phoeniucoptera*, but after carefully watching it and also sharing the photos to Dr Bakul Trivedi and Dr Samiksa Trivedi, it was confirmed as an Asian Emerald Dove *Chalcophaps indica*. Further investigation revealed that the bird had collided with a windowpane, resulting in fatal injuries, as reported by my students. The sighting of this species in the hilly terrain of Girnara, which features a mosaic of agricultural land and forest patches, is particularly noteworthy. This incident highlights the importance of monitoring avian species in varied habitats, especially those on the periphery of their known distributions.

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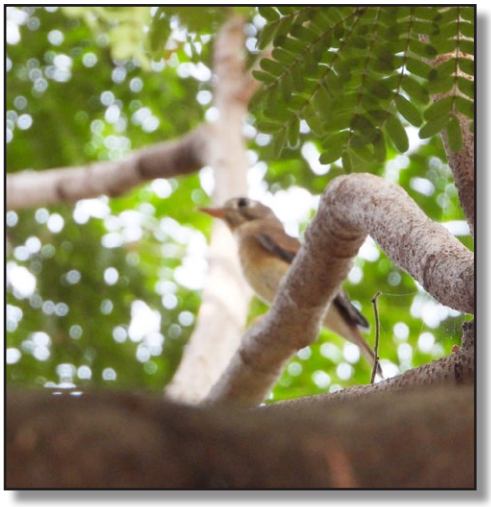

Sighting of Brown-breasted Flycatcher or Layard's Flycatcher *Muscicapa muttui* at Nal Sarovar Bird Sanctuary

On October 19th, 2023, around 7:00 am, I sighted a bird at the check-point area of Nal Sarovar Bird Sanctuary. During my observation, I it actively moving between perches and catching insects in mid-air. I captured a few long shots of the bird as it was quiet far and promptly forwarded it to ornithologist Devvratsinh Mori for identification. He confirmed it as a Brown-breasted Flycatcher *Muscicapa muttui*. The following morning, I revisited the exact location to find the flycatcher again, but unfortunately, I could not find it again. Could its absence be considered as to the bird's brief stop-over during migration? In Gujarat, the Brown-breasted Flycatcher is considered an uncommon winter visitor observed in select regions (Ganpule, 2022). This sighting is significant as it adds to the flycatcher checklist of Nal Sarovar Bird Sanctuary.

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Sighting of Blue-throated Flycatcher *Cyornis rubeculoides* at Nal Sarovar Bird Sanctuary

While birdwatching at the Nal Sarovar Bird Sanctuary on November 3rd, 2023, at 14:37 hours, searching for the Green Warbler *Phylloscopus nitidus*, we saw a small blue-coloured flycatcher *Cyornis rubeculoides* flitting from branch to branch on a Neem tree *Azadirachta indica*. Capturing beautiful shots, we initially identified it as a Tickell's Blue Flycatcher *Cyornis tickelliae*. Later, we sent these pictures to senior birdwatchers Sunil Kini and Kunan Naik for confirmation. They promptly responded, identifying it as a Blue-throated Flycatcher *Cyornis rubeculoide*. This sighting was particularly noteworthy as such a tiny and beautiful flycatcher had never been observed in this area before. It is likely to be the first recorded sighting of this species in the Nal Sarovar area.

Kamrudin Alvani & Latif Alvani: Bird guide at Nal Sarovar Bird Sanctuary, Gujarat

Sighting of Black-hooded Oriole *Oriolus xanthornus* at Nal Sarovar outskirts

On October 11th 2023, at around 4pm, during our routine birdwatching session with a target to find Common Whitethroat *Curruca communis* in the area, we were surprised to spot a bird about the size of a myna. It was yellow coloured with a black hood, perched on a neem tree *Azardirachta indica*. It did not stay much and though despite a brief sighting, we captured record shots from a considerable distance. After reviewing the photos, we confirmed it as a Black-hooded Oriole *Oriolus xanthornus*. This species is common to uncommon and found in well-wooded regions of Gujarat, as stated by (Ganpule 2022). This sighting marks an important addition to the Nal Sarovar area checklist, while also enhancing the documentation of its rich avian biodiversity.

Kamrudin Alvani & Latif Alvani: Bird Guide at Nal Sarovar Bird Sanctuary, Gujarat.

House Crow *Corvus splendens* prey on a Kentish Plover *Anarhynchus alexandrines*

On Wednesday, June 5th, 2024, our birding team, Manoj Tank, Nirav Pomal and me, planned a visit to Chhari Dhandh in Kutch. While observing the courtship display of Greater flamingos *Phoenicopterus roseus*, one of our team members suddenly sighted a House crow *Corvus splendens* trying to kill a Kentish plover *Anarhynchus alexandrines*. As the crow was aggressively attacking the plover, another crow came closer and tried to snatch the prey. Despite many attempts to escape, the plover was incapable to do so. Eventually, the first crow started eating the it while still alive. After a few minutes the crow flew away with the prey. Although we know that house crows are omnivorous and scavengers, this was the first time we observed one preying on a wader.

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Sighting of Forest wagtail *Dendronanthus indicus* at Nal Sarovar Bird Sanctuary

On November 20th 2023, at around 12pm, while birdwatching at check-post area of Nal Sarovar Bird Sanctuary we were fortunate to spot a Blue-throated Flycatcher *Cyornis rubeculoides*. Motivated by this sighting, we revisited the same site in expectation to find the same bird again. As we were searching the flycatcher, our attention was diverted by a wagging tail of a wagtail. It was continuously of the move, characteristically wagging its tail sideways. Intrigued, we carefully approached closer to take few record shots. We identified it as a Forest Wagtail *Dendronanthus indicus*. This sighting was particularly exciting for all of us, as this species was a lifer for our birdwatchers group. The serendipitous sighting of Forest Wagtail added a pleasant surprise to our birdwatching excursion, while emphasising the unpredictable and rewarding nature of birdwatching at Nal Sarovar Bird Sanctuary.

Kamrudin Alwani & Tayab Alvani: Bird Guide at Nal Sarovar Bird Sanctuary.

Sighting of Merlin *Falco columbarius* on the outskirts of Nal Sarovar Bird Sanctuary

On the evening of November 11th 2023, around 4.15 pm, I was birdwatching on the outskirts of Nal Sarovar Bird Sanctuary, searching for a Short-eared Owl *Asio flammeus*. While exploring the area, I observed three individuals owl roosting on Khejri tree *Prosopis cineraria*. On moving further towards the grassy patch, I spotted an unidentified falcon resting on the ground. Initially, I assumed it was a Common Kestrel *Falco tinnunculus*, but on zooming the picture on the camera screen, I realized it to be a different species. I tried get closer to this smaller looking falcon, but unfortunately, it flew away before I could get close. Still, I managed to get one long-distance photograph. I sent the picture to senior birdwatcher Sunil Kini directly from the field, who confirmed it to be a Merlin *Falco columbarius*. This sighting might be the first photographic record of the species in this area.

Memud Multani: Bird guide at Nal Sarovar Bird Sanctuary, Gujarat

Sighting of Indian Pitta *Pitta brachyura* near Blackbuck National Park

I work as a naturalist at Blackbuck Safari Lodge in Blackbuck National Park, Velavadar in Bhavnagar district. On 26th May 2024, after completing the morning safari at the park, I returned to the resort at around 09:00 hours, where I heard a distinctive call of a bird near the lakeside of the resort. Upon further observation, I saw two Indian Pittas *Pitta brachyura* calling from a tree. They remained there for a while before flying away. After a few minutes, they returned to the ground to feed. I also observed Red-vented Bulbuls *Pycnonotus jocosus* teasing them. The Indian Pittas stayed in the area for a few days but were not sighted afterwards, possibly they might have moved elsewhere. The lodge's ample green trees possibly attracted the Indian Pittas to this area. I talked to Dr. Indrabhai Gadhvi, a senior birdwatcher of the region regarding any earlier sightings near the park. He mentioned about the sightings in Bhavnagar but none near or at Blackbuck National Park, Velavadar. Therefore, my sighting of the Indian Pitta near Velavadar could be the first recorded instance and is it might be significant for understanding its distribution.

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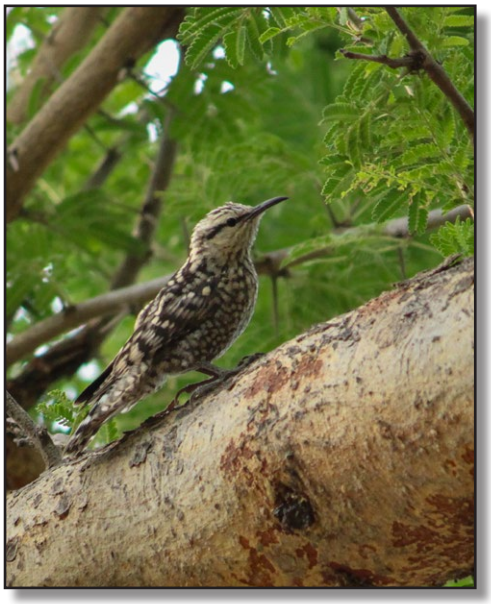

Sighting of Indian Spotted Creeper *Salpornis spilonota* at Jasara, Banaskantha

On May 5th, 2024, while exploring the deciduous forest of Jasara in Banaskantha, I heard an unfamiliar yet melodious call that piqued my curiosity. Following the sound, I spotted a bird climbing the trees of *Capparis decidua* from bottom to top. The bird swiftly moved between trees with each flight and eventually perched on a khejri tree *Prosopis cineraria*, revealing itself as the Indian Spotted Creeper *Salpornis spilonotus*. This marked my first sighting of the species, and I was enthralled by its behaviour, unable to take my eyes off it or lower my binoculars. After capturing several photographs and documenting my observation on eBird, I felt a sense of awe at this remarkable sighting. According to its status and distribution, the Indian Spotted Creeper is listed as Rare, resident in south Gujarat and central Gujarat, with isolated records from Saurashtra (Ganpule 2022). Searching eBird records for Indian Spotted Creepers revealed only two entries from the Dahod district (Jani, 2016) and (Munshi, 2016). The first and only record from Saurashtra dates back to 2005, observed in Gir Forest by Shri P. S. Thakkar (Thakkar, 2005). Therefore, my sighting from Banaskantha marks the first recorded instance in this region, highlighting its significance.

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Sighting of Amur Falcon *Falco amurensis* in Bharuch

On 5th May 2024, Vishal Makwana and I visited Shuklatirtha along the banks of the Narmada river in Bharuch district for birdwatching. As we walked ahead searching for waders, we spotted several species, including Small Pratincole *Glareola lacteal*, Little Ringed Plover *Charadrius dubius*, Indian Spot-billed Duck *Anas poecilorhyncha*, Black-bellied Tern *Sterna acuticauda*, and River Tern *Sterna aurantia*. Suddenly, I noticed a bird of prey hovering in the sky. Initially, we thought it might be a Shikra *Accipiter bandius*. However, upon taking a photo and zooming in, I noticed an orange hue near its vent, leading me to believe it was an Amur Falcon *Falco amurensis*. I proceeded to take more photographs. Within moments, the River Tern began mobbing the falcon, causing it to fly away. I immediately shared the photos with Jugal Patel and Bhavik Dutt for confirmation. Bhavik Dutt confirmed it was indeed Amur Falcon. Previously, Jugal Patel had observed an Amur Falcon in Hansot on 5th December 2021, marking this a second confirmed sighting in Bharuch district. The Bird Conservation Society, Gujarat, conducted a special program on Amur Falcon monitoring at Mahuva in April 2024. This observation contributes to understanding the species' return migration routes through Gujarat.

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Sighting of Black Eagle *Ictinaetus malaiensis* at Pipalset Village, Dist. Valsad

On April 28, 2024, I was driving through the jungle near Pipalset village (taluka Kaparada, dist. Valsad), to collect seeds as a part of my duty. I observed a raptor flying clicked few pictures, of the bird and reviewed but was unable to identify. To make sure I checked on the Merlin app and asked few experts, and finally it was identified as Black Eagle *Ictinaetus malaiensis*. There was also a Shikra *Accipiter bandius* flying along with Black Eagle for few moments. The location was at the junction forest and a village. According to published records there have been two previous sightings of Black Eagle in areas near Rajkot (Trivedi & Acharya, 2021; Dhami, 2021). The Field Guide to the Birds of Gujarat describes the Black Eagle as "rare winter visitor in some well-wooded parts of the state" (Ganpule 2022). My observation of the species in late April hints that Black eagle might prolong their stay in the wintering areas.

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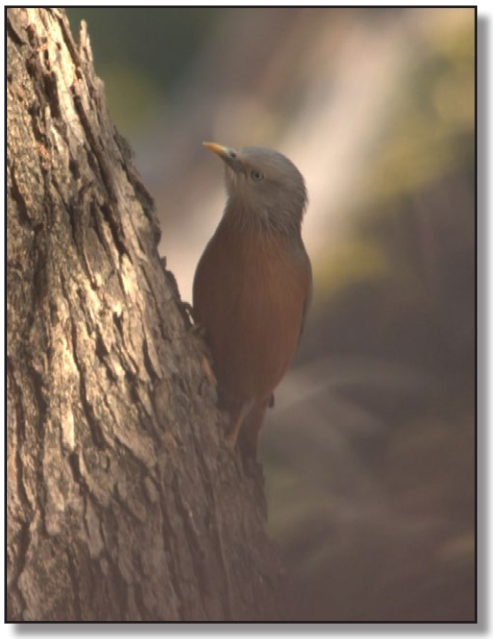

Sighting of Chestnut-tailed Starling *Sturnia malabarica* at Jamnagar, Gujarat

Ranjit Sagar Dam at Jamnagar, is a popular birding area. On the morning of 25th January 2024, I went for bird-watching along with Yashodhan Bhatia and Ashish Pankhania. We observed common birds which are usually sighted in the parking lot area. Red vented bulbul *Pycnonotus cafer*, Common myna *Acridotheres tristis*, Brahminy starling *Sturnia pagadarum*, Rose-ringed parakeets *Psittacula krameri*, Coppersmith barbet *Psilopogon haemacephalus* were present. There was also a pair of Brahminy Kite *Haliastur indus* busy in nest building activity on a nearby Pipal tree *Ficus religiosa*. While I was engaged in shooting the courtship behaviour of Brahminy Kites, Yashodhan Bhatia spotted a Chestnut-tailed Starling *Sturnia malabarica* on a nearby gulmohar tree *Royal poinciana*. He whispered and called me to see it. I was excited as it was a lifer for me and took few record shots. There are regular sightings of Chestnut tailed starlings in forests areas of Barda hill ranges in Jamnagar, as they breed there, but it is a rarity to spot them in a garden area like Ranjit Sagar. All in all, it was a fantastic sighting for me and made my day!

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Different behavior of Steppe Eagle *Aquila nipalensis*

It was early morning, January 21st 2024, during peak winter at Little Rann of Kachchh. I was enjoying the morning drive and looking for wildlife around with my family. We found harriers and a Steppe Eagle *Aquila nipalensis* perched on the ground. While driving through the area, we observed one raptor sitting on the ground. I had not seen a raptor sitting on the ground with its wings slightly spread before, so I found it strange. We could not recognize the bird from far away, so we drove near it. We then stopped at a safe distance and saw that it was a Steppe Eagle. At first, I thought it might be hiding, but there was no other raptor, predator or car around, and it did not panic or fly away when we drove towards it. After one month, I observed similar behaviour from another Steppe Eagle on 9th March 2024 at Thol Bird Sanctuary near Ahmedabad. In this case, the Steppe Eagle was lying so close to the ground that it looked like it was trying to hide from danger or was injured. The wings were spread a little more than what I had seen in the Little Rann of Kachchh. But again, there was no danger around. With curiosity, I crawled towards it and photographed it from a safe distance. It allowed a close approach, and I was thrilled to get photographs from a short distance. I could not understand the reasons for this behaviour. On contacting Mr Nirav Bhatt, who has extensive experience with the Raptors identification. He said, this behaviour is commonly seen in Steppe Eagles and has been photographed many times. This is probably because the bird is resting or trying to camouflage itself on the approach of a car or a predator. The Steppe Eagle is known to rest or roost on the ground (GRIN 2021).

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Unusual Feeding Behaviour by Isabelline shrike *Lanius isabellinus*

On the morning of 30th December 2023, I visited Navagam wetland in Kheda. The lake was teeming with fish, and as usual, it attracted many birds and they were busy feeding. Painted Storks *Mycteria leucocephala*, egrets, cormorants, and River Terns *Sterna aurantia* were there along with other birds. Everything was normal and I enjoyed capturing some lively actions with my camera. However, at around 10 am, my attention was drawn towards two birds at the wetland, both trying to secure their meals. One was an Isabelline Shrike *Lanius isabellinus*, and the other was a House Crow *Corvus splendens*. Though Isabelline Shrike is a scrubland bird and it prefers areas in close vicinity to the wetlands, yet its presence was conspicuous because of its distinct feeding behaviour at this site. As the fishes were abundant in the pond River Terns were active and catching them from the water surface, but some individuals did not grip it well, thus causing the fish to drop on the ground. Seeing this as an opportunity, Isabelline Shrike and House Crow, both quickly moved to grab the victual. I spent the next half hour observing this behavior and documenting the scene. Though there were three crows in the area, the Isabelline Shrike persistently competed with them for the dropped fish. While the crows were usually more successful, the shrike managed to secure a catch twice. I was fortunate enough to capture one of those moments when the shrike grabbed a fish and swiftly flew away. Considering the fact that Isabelline Shrike is almost insectivorous with rare instances of taking on small lizards and small birds, scavenging on fish is really surprising. This interesting feeding behaviour demands further study.

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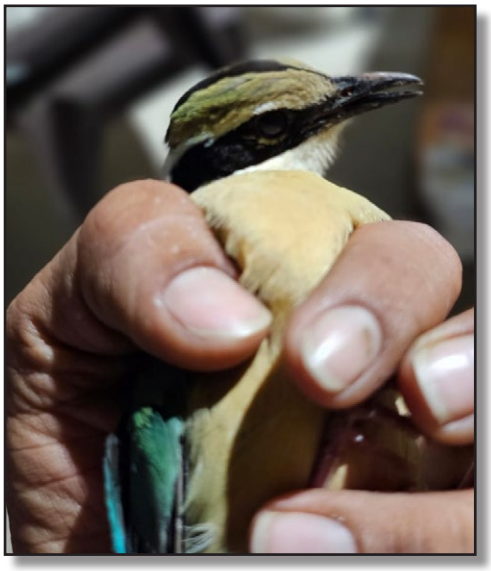

Recovery of the Indian Pitta *Pitta brachyura* in Wadhwan

On June 19, 2024, Surendranagar Forest Division at Wadhwan made a commendable work which can be considered as a significant conservation effort. A bird rescuer informed the department that two residents has kept couple of Indian Pittas *Pitta brachyura*. On inquiring it was disclosed that they had obtained the birds from Ahmedabad bird market, which is infamous for its trade in exotic avian species. The forest department acted swiftly, recovered the birds and ensured the safe return into their natural habitat. This commendable action by Surendranagar Forest Division validated their commitment to wildlife conservation. During the thorough investigation, it was revealed that this was the first documented case of illegal trade involving Indian Pitta in Gujarat. This incident highlighted the critical issue of wildlife trafficking, particularly involving protected species. The Indian Pitta, known for its striking plumage and distinctive vocalizations, is protected under the Indian Wildlife Protection Act, 1972. This case serves as an important reminder to the significance of conservation initiatives and the proactive role of authorities in conserving vulnerable species.

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