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Occurrence of Grey-bellied Cuckoo *Cacomantis passerinus* in Vadodara District and its distribution in Central Gujarat

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Introduction

The Grey-bellied Cuckoo (*Cacomantis passerinus*) is a summer visitor to hills of North Pakistan, and Himalayas; a widespread resident species in Central India, Western and Eastern Ghats; wintering further south in India and Sri Lanka (Kazmierczak 2000; Grimmett *et al.* 2011; Ali 2012, Rasmussen & Anderton 2012). It is a summer visitor in eastern parts of Gujarat (Grimmett *et al.* 2011). Though found in most of Peninsular India, it is not common in drier north-western parts of the country (Payne 2005).

The species has been listed as a ‘Least Concern’ species in The IUCN Red List of Threatened Species owing to its extremely large range and stable population trend (Birdlife International 2016). This fairly common, slim, arboreal bird is found in scrubland and open wooded country, frequently flying to different vantage points and calling from tree tops (Grimmett *et al.* 2011, Ali 2012, Rasmussen & Anderton 2012). The adult male and grey morph female are greyish with white vent and undertail-coverts, while female is distinguishable by barred whitish abdomen and more barred rectrices (Erritzøe *et al.* 2012). The hepatic female is bright rufous above and barred dark-brown with unbarred rufous tail (Grimmett *et al.* 2011, Rasmussen & Anderton 2012, Erritzøe *et al.* 2012). We report here occurrence of this species in Central Gujarat.

Observations

On 17 June 2017, a hepatic female of Grey-bellied Cuckoo was observed in the scrub around Jawla Irrigation Reservoir, north of Vadodara. This being a new species to the area, an extensive search of the species was initiated the following year and literature as well as eBird data for the area were surveyed. Finally, on the morning of 27 May 2018, while birding at Timbi

Table 1: Records of Grey-bellied Cuckoo in Central Gujarat

District	Date	No.	Location	Observer	Remarks
Vadodara	14/02/21	1	TIR	AJ, BV, VV, HJ, NV	
	12/12/20	1	Sindhrot Nature Education Park	AJ, BV, VV, HJ, NV	
	29/09/20	2	Chanakyapuri Society	VB	
	28/09/20	1	Chanakyapuri Society	VB	
	26/09/20	1	Chanakyapuri Society	VB	
	17/09/20	1	Vasundhara Park Society	JP	
	12/09/20	2	Vasundhara Park Society	JP	
	11/08/20	2	Ishwardarshan Society	SA	
	13/07/20	1	Ankodiya Road	MAK	
	26/07/20	1	Club life Road	MAK	
	20/07/20	1	Club life Road	MAK	
	27/06/20	1	Jambughoda Wildlife Sanctuary	TS, DS, KS	
	24/05/20	1	Club life Road	MAK	
	23/01/20	1	Club life Road	MAK	
	20/01/20	2	TIR	MAK	
	24/12/19	1	Vadhvana Outskirts	KA, AM	
	08/10/19	1	Club life Road	MAK	
	25/08/19	4	Targol	TT	
	14/10/18	1	TIR	ST	Hepatic female perched on a wire
	24/09/18	1	TIR	KEP	
	19/09/18	1	Vadhvana	HP, MM	Male perched on a wire
	16/09/18	1	Farmhouse, near Sakarda	JP	
	15/09/18	1	TIR	HP, KN	
	13/09/18	2	TIR	KEP	
	09/09/18	2	TIR	HP, KN	Two males perched on the same branch of <i>Prosopis juliflora</i>
	08/09/18	1	TIR	HP, HA, KP, KN	
	28/08/18	1	TIR	HP, MM	Male perched on a wire
	13/08/18	1	M.S.U Campus	KEP	
	12/08/18	1	TIR	HP, KN	
	11/08/18	1	TIR	HP, KN	
	09/08/18	1	TIR	HP, KN	First the call was heard and then we spotted it
	29/07/18	2	TIR	HA, KN	Two individuals (males) were chasing each other
27/05/18	1	TIR	HP, KP, MM	Hepatic female was seen perched on an <i>Ipomoea fistulosa</i>	
17/06/17	1	Jawla	HP	Hepatic female flew away from a shrub	
22/04/17	1	Vadhvana	AC, TS, DS, KS	Perched on electric wire	
Anand	17/01/20	1	Vadtal Road	AN	Hepatic female was seen
	14/03/18	1	Mahi River	PN	Hepatic female was seen
	23/10/16	1	Pepariya Talav	BM	Male was seen
	21/10/16	2	Pepariya Talav	BM	One immature and one adult were seen
	20/10/16	1	Pepariya Talav	BM	One female was seen
Dahod	18/01/20	1	Unnamed Road	VP	Hepatic female was seen
Panchmahal	06/10/19	2	Vavkuva Haldari mata Temple	TT	
	22/09/18	1	Shivrajpur	HA, KP, MM	Male perched on wire
Kheda	22/08/20	2	Pariej Lake	DAS	
	01/02/20	1	Heranj Lake	VM	

Abbreviations for Table 1:

TIR- Timbi Irrigation Reservoir
 AC- Anup Chavda, AJ- Akshay Jethi, AM- Aamir Matli,
 AN- Abhishek Nena, BM- Bhavesh Mengar, BV- Bharat Vyas,
 DAS- Dakshina Sudhir, DS- Dhyey Shah, HA- Hitesh Ameta,
 HJ- Heli Jethi, HP- Hiren Patel, JP- Jigu Patel, KA- Kandarp
 Andharia, KS- Ketan Shah, KEP- Keval Paliya, KN- Keyur
 Naria, KP- Kirnalee Patel, MAK- Mohammad Anesh Khira,
 MM- Meera Makwana, NV- Navya Vyas, PN- Pratik
 Nagrecha, SA- Seema Abhale, ST- Sujata Talegaonkar, TS-
 Trupti Shah, TT- Tushar Tripathi, VB- Vyomkesh Buch, VM-
 Vishal Mistry, VP- Viral Pankaj, VV- Vyom Vyas.

Irrigation Reservoir (henceforth TIR) at 08:30 hrs, two of our team members spotted this rufous-coloured bird with paler white underparts, perched on the outer edge of a thick cover of morning glory (*Ipomoea fistulosa*). Looking upon the position of its perch, i.e. above water, it was first perceived to be a crane (*Porzana* sp.). While we tried to get a better look at the mysterious looking bird, it flew and shifted its location to a dried shrub nearby. Being out of range, photographs could not be taken but we were able to get a clear view of the species through binoculars. Closer observation through binoculars revealed its bright rufous colour with prominent bars on white paler underparts; based on its size and further referring to the field guides, it was identified as a Grey-bellied Cuckoo.

Later, on 29 July 2018, while birding at the Shirpor Village, which lies adjacent to the TIR, a bird was seen sitting on top of an electric pole. It being a cloudy day, only the silhouette of the bird was visible. Being intrigued by the uncommon looking silhouette, photographs were taken to identify the bird. It was identified to be a male Grey-bellied Cuckoo. After a few minutes, one more male was sighted chasing the first one. An effort was made to follow them but they disappeared fast and could not be traced again that day. This species was then regularly observed at TIR as well as few other places around Vadodara. The details of our observations and those reported by others, including eBird (2021), are given in Table 1.

Discussion

The species has been listed as resident and breeding in the checklist of birds of Gujarat (Parasharya *et al.* 2004). Bagda *et al.* (2015) have shown its presence in the forests of South Gujarat, Saurashtra and Kachchh but not in central Gujarat. Recent sighting records during monsoon are mainly from Sabarkantha and Gir National Park, along with some scattered records from Saurashtra and Kachchh (Bagda *et al.* 2015, Ganpule 2016). It has been recorded as resident in Gujarat, a monsoon migrant

and resident in forests of South Gujarat (Ganpule 2016). The species has also been reported at Hasnapur Dam in Girnar Wildlife Sanctuary (Bagda *et al.* 2015). Padate *et al.* (2001) show no record of the species from Vadodara. The occurrence of Grey-bellied Cuckoo in Central Gujarat was not reported till 2016. Dharmakumarsinhji (1955) stated that it is found in wooded areas of Gujarat.

In Anand District, adult male, female and an immature have been sighted on different occasions in 2016 while a hepatic female was sighted in 2018 (Nagrecha 2018) and in 2020. Narmada District shows a four-year-old record of the species along with two recent records in 2018 (eBird 2018). We could gather records from Pachmahal District as well, during our own-field survey.

In Vadodara previously, a single male of the species was recorded a year ago at Vadhwana Irrigation Reservoir (eBird 2018). Though the species has been sighted frequently this year, there are only two previous records of the species from Vadodara, and its occurrence in this region is considered as uncommon. This species is known to occur in secondary forest, brush, gardens, towns and villages, grassy plains and swamps (Ali & Ripley 1969, Becking 1981, Zacharias & Gaston 1983). In Vadodara District, we have observed it in scrub land in Vadhwana and TIR and in habitats in The M. S. University of Baroda Arboretum.

Along with previously published records and records from eBird (2018), various regions of Vadodara were extensively surveyed for compilation of this report. Among the locations surveyed, Ajwa Reservoir on eastern side and Sindhrot on western side of the city showed no presence of the Grey-bellied Cuckoo. It was noted that these locations showed an active presence of the Common Hawk Cuckoo (*Hierococcyx varius*). The Common Hawk Cuckoo is a brood parasite, laying its eggs in the nests of larger passerines, while Grey-bellied Cuckoo prefers laying eggs in the nests of smaller passerines like Common Tailorbird (*Orthotomus sutorius*), Plain Prinia (*Prinia inornata*), Ashy Prinia (*Prinia socialis*), Zitting Cisticola (*Cisticola juncidis*), Black-headed Cuckooshrike (*Lalage melanoptera*), House Sparrow (*Passer domesticus*), as well as two species of Sunbirds (*Leptocoma* sp.) (Becking 1981, Payne 2005, del Hoyo *et al.* 2020, Praveen & Lowther 2020, Trivedi *et al.* 2020). A survey of host species at the two places indicated that the population of the host species for Grey-bellied Cuckoo is low in the said areas. It may be inferred that because of low populations of host species in the area, Grey-bellied Cuckoo was absent. Another reason could be that locations which showed presence of the Common Hawk Cuckoo do not

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harbour Grey-bellied Cuckoo, probably due to greater competition and limited availability of nests for brood parasitism. The statement is further supported by the fact that the locations where we were able to sight Grey-bellied Cuckoo showed no presence of Common Hawk Cuckoo. However, the data we have is insufficient to make any conclusions.

It will not be proper to discuss the distribution of species in the whole of Central Gujarat based on this gathered data. In Central Gujarat, Grey-bellied Cuckoo is mainly recorded in scrubland around reservoirs as well as in forested patches. The change in the habitat around wetlands due to Narmada Canal has probably attracted the species to Central Gujarat. Nevertheless, it is clear that the species has now been recorded in the region a number of times.

Through extensive field as well as literature surveys, we could gather sight records from five districts of Central Gujarat. However, distribution data from other districts, i.e. Ahmedabad and Chhota Udaipur, is lacking. We request birdwatchers of Central Gujarat to report their sightings of Grey-bellied Cuckoo for a better understanding of its distribution in the state. We need to assess the impact of Narmada Canal system on the distribution of this species in this region.

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