Nesting attempt of Lesser Flamingos *Phoeniconaias minor* in urban areas of Bhavnagar, Gujarat

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Introduction

The distribution of the Lesser Flamingo *Phoeniconaias minor* includes Asian and African regions (Del Hoyo *et al.* 1992) with an estimated total non-breeding population of more than 2.6 million individuals (Childress *et al.* 2008). Lesser Flamingo populations show a globally decreasing trend and are thus considered "Near Threatened" under the criteria A2c+3c+4c,(BirdLife International 2009). The species breeds regularly at only five colonies in India, Namibia, Botswana and Tanzania, while other locations host only occasional or suspected breeding attempts, such as Mauritania (Childress *et al.* 2008).

Ali (1945) recorded a huge flock of 100,000 Lesser Flamingos including adults and juveniles of 2-3 months, on the muddy expense of shallow Banas River, near its mouth opposite Dhutari bet in Little Rann of Kachchh, Gujarat. In 1974, about 2000-5000 Lesser Flamingos were counted nesting at Flamingos City. In 1998, a total of 20,000 chicks and 30,000 adult Lesser Flamingos were recorded at the central part of Wild Ass Sanctuary, near Zinzuwada in Little Rann of Kachchh, Gujarat (Singh *et al.*, 1999).

The instances of Greater Flamingos breeding far from the traditional nesting sites have been reported frequently. Thakker (1983) observed about 70-80 nests at Thol tank (now Thol Wildlife Sanctuary) in 1981. The Greater Flamingos once were observed attempting to nest at

Shahwadi in the urban areas of Ahmedabad also (Tatu 1997). Recently Parasharya and Gadhvi (2019) reported successful nesting of Greater Flamingos from the saltpans near Bhavnagar, which is quite far from the traditional nesting areas of the species.

Lester (1904), for the first time, suspected that Lesser Flamingos might have bred somewhere in Kachchh. His speculation was doubted by Salim Ali as there were no known reports of the breeding of Lesser Flamingos within Indian limits at that time. Later on, Ali (1954) himself agreed with Lester's speculation when he observed 1,00,000 adults and juveniles. The first confirmed report of the nesting of this species was given by Ali (1974) at the Flamingo City.

Since then,there have been no records of Lesser Flamingos breeding at the Flamingo City, but there have been ample suggestions of their breeding somewhere around. Mundkur *et al*, (1989) suspected that the actual "identified" Flamingo City was abandoned and Lesser Flamingos had started breeding elsewhere in Little or Great Rann of Kachchh, in Gujarat. The first evidence of Lesser Flamingos breeding in the central part of Wild Ass Sanctuary in Little Rann of Kachchh was gathered by Uday Vora on January 8, 1985 (Parasharya and Tere 2006). A colony of 10,000 nests was observed at the salt pans about 10 km north of Koparani village, which was spread over 3.5 km² area. It was presumed that Lesser Flamingos had bred there, in 1983 and earlier years also, as they could identify

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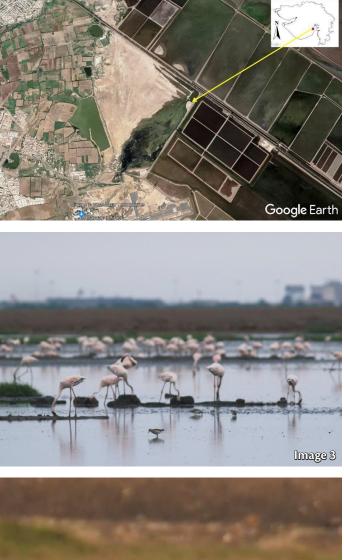
a few old nests in the colony (Vaishnav *et al.*, 2005). Lesser Flamingos had been also reported breeding on the mudflats of Purabcheria, in Little Rann of Kachchh. It was presumed that the birds were nesting at this site regularly for many years, however, the site was only known after 1989, when it was surveyed for three successive years from 1986 to 1988 (Mundkur *et al.*, 1989). The recent records of Lesser Flamingo nesting colonies with more than 30,000 nests were reported in the eastern parts of the Little Rann of Kachchh (Rathwa, 2022).

However, there are scanty reports of the lesser Flamingos attempting breeding or nesting in the other areas of Gujarat except the above mentioned traditional nesting sites. Lesser Flamingos attempted nesting at Porbandar City in 1991, although, it was an unsuccessful attempt (Khacher, 1994). Hundreds of young brown chicks (probably couple of months old) were seen at Kumbharwada area in Bhavnagar city during November 2001 (Parasharya D. personal communication). The observations reported here are first of its kind where the flock of Lesser Flamingo attempted to nest in saline shallow waters near the Airport of Bhavnagar.

Observations

Authors visit the site behind the Bhavnagar airport (21°45'41.64"N 72°11'23.37"E) regularly for birding. The area is about 1.5 km². The part of the site (0.5 km²) is a shallow wetland mainly formed due to water overflowing of salt water from the nearby Saltpan pumps (Image 1). Along-with Flamingos, waders such as sandpipers, redshanks and godwits are frequent visitors of the site. On 5th October 2021, the authors reached the site at around 4.30 pm. While scanning the site, an unusual behaviour of Lesser Flamingos was observed. Few birds were sitting on a mound like structure (Image 1 and 4), whereas few birds were digging out the soft mud and putting it on mounds (Image 3). At least eight birds were giving the mud deposition a round shape by encircling the mud mound with its beak. About 70 to 90 birds were actively involved in this activity. The observations of all the activities of these birds were recorded (Table 1). About 19 nests were complete and the birds were sitting on these nests. Few individuals were also engaged in completing the remaining nests which were about 56. The authors clicked the photographs and for further confirmation sent them to Mr. Uday Vora and Dr. Dishant Parasharya who had witnessed such nesting activities in past at traditional nesting areas. Both of them confirmed it to be the nesting activity of Lesser Flamingos. They suggested to monitor this breeding colony regularly and note the observations. The authors tried to observe the possibility of the eggs from an elevated space

through a spotting scope, but could not find any in either of the nests.





Sr. No.	Date	Time	Population	Total nest in preparation	Complete nest	Birds sitting on completed / partially completed nest
1	05-10-2021	4:45 PM	3500	56	19	39
2	06-10-2021	4:30 PM	3500	56	19	30
3	07-10-2021	4:15 PM	3500	56	19	22
4	08-10-2021	5:00 PM	3500	50	20	28
5	09-10-2021	4:30 PM	3500	44	25	37
6	10-10-2021	4:30 PM	3500	35	35	42
7	11-10-2021	4:45 PM	3500	28	42	48
8	12-10-2021	7:30 AM	Nil	28	42	Nil
9	13-10-2021	7:30 AM	Nil	28	42	Nil
10	14-10-2021	7:30 AM	Nil	28	42	Nil
11	15-10-2021	4:30 PM	Nil	28	42	Nil
12	16-10-2021	4:30 PM	Nil	28	42	Nil

Table 1: Observations of nesting activity at Bhavnagar Airport site

The authors observed the site for almost 8 subsequent days. On 12th October there was not a single Lesser Flamingo at the site. The entire area was deserted, and only a few waders were observed. There must have been some disturbance due to which they had evacuated the site. Surprisingly there was no damage to the mounds constructed by the birds. We visited the site for next four days and the conditions were same and no Lesser Flamingos were observed. To evaluate the water quality we also took the water sample and analyzed the primary Physical properties of water (Table 2).

Table 2: Physical properties of water

Sr. No.	Date	Time pH		Salinity (ppt)	TDS (ppt)
1	11-10-2021	4:45 PM	7.49	52	1.05

Discussion

Lesser Flamingos build mud-mound nests similar to but smaller than those of the Greater Flamingo (Brown 1971). They nest only when the inundation of the area occurs. In this area, the saline water was dumped through the water pumping station used by salt pans. However, the volume and duration of pumping such water is not fixed and hence the area remains partly inundated. Thus it would have served as a temporary nesting ground for the flamingos to initiate nesting. However, the depth of the water did not increase above 1 ft thus the feral dogs would have approached the nest and or birds. After establishing a colony, Lesser Flamingos can abondon the nests, if conditions do not remain favorable to continue (Parasharya and Tere 2006), which can be the cause of deserting the area after nest making on 12th October 2021. This attempt of nesting by Lesser Flamingo is more than 300 km away from its traditional nesting grounds, which itself is a record except Porbandar (Khachar 1994). Salt pans of Bhavnagar are an IBA and host thousands of birds during migratory season. Such nesting attempts increase its conservation value with reference to avifauna.

Acknowledgement

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Sighting of Pied Wheatear *Oenanthe pleschanka* at Chhari-Dhandh, Kachchh: An addition to the Gujarat avifauna

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On 26 February 2024, I was on a regular birding trip at the Chhari-Dhandh area in Kachchh, along with Tushar Majethia. I saw an unusual wheatear (*Oenanthe* sp.) on a bush top and took some photos. I checked the images online and to my surprise, found that it was a Pied Wheatear *Oenanthe pleschanka*. More photos of this individual can be found in the eBird checklist: https://ebird.org/checklist/S162992669. Interestingly, this was a Pied Wheatear of the scarce *vittata* morph, which is white-throated with the black eye mask continuing the neck sides. The crown was extensively black-tipped. It is possible that this was a first-summer bird.

This is the first photographic record of the species from Gujarat. Later, senior birdwatchers also made me aware that it is also an addition to the Gujarat avifauna. On searching references, I found that the Pied Wheater is included in the 'hypothetical or unconfirmed' section in Appendix 2 of the recently published 'A Field Guide to Birds of Gujarat' (Ganpule *et al.* 2022). The species is given as 'possible in Gujarat. Could occur in the state as a vagrant during passage. A few claimed sight records are treated here as unverified'.

Thus, this sighting confirms the occurrence of the Pied Wheatear in Gujarat. This sighting is in late February and