References

Ali, S., & Ripley, S. D., 2001. *Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. Volume 7, Sponsored by Bombay Natural History Society. Oxford University Press.

Das, N. & Adhikari, S., 2019. Study of nesting behaviour of Asian Paradise Flycatcher *Terpsiphone paradisi* (Aves: Passeriformes: Monorchidae) from southern West Bengal, India. *Journal of Threatened Taxa* 11 (6): 13782–13785. https://doi.org/10.11609/jott.4868.11.6.13782-13785

Ganpule, P., 2016. The birds of Gujarat: Status and distribution. *Flamingo* 8 (3) – 12: 2-40

Gokula, V. & Vijayan, L., 2003. Foraging and nesting behaviour of Asian Paradise Flycatcher *Terpsiphone paradisi* in Mudumalai Wildlife Sanctuary, Tamil Nadu, India. *Forktail* 19: 142–144 □

Data on nesting of Lesser Flamingo *Phoeniconaias minor* in the Little Rann of Kachchh

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The paper by Rathwa (2022) regarding the successful breeding of the Lesser Flamingo (*Phoeniconaias minor*) in the Little Rann of Kachchh in the previous issue inspired to me dig out my old notes on the nesting of this species in the Little Rann of Kachchh. I was posted as RFO in the Wild Ass Sanctuary, also known as the Little Rann of Kachchh, at Bajana, and had observed nesting in this area. In the monsoon of 2010, the nesting was unsuccessful. In 2013, the nesting was successful while in 2014, it was partially successful. It was in 2014 that I was able to collect some data on the nest and eggs of the Lesser Flamingo in this area. I present this data on the nesting of this species in the Little Rann of Kachchh in 2014.

Photo: B. R. Makwana

Photo: B. R. Makwana

In 2014, flamingo nesting was observed in salt pans, about 12 km from Vachhraj-*byet*, in six different groups. The location was at 23° 12' 252" N, 71° 22' 799" E. It appeared that the soft mud / silt from river waters collected in the salt pans due to the flooding of the rann was helpful in nest building as the soft mud could be easily collected and shaped into the nest by its beak. Due to the collection of this mud, a small depression was caused around the nest. These depressions were of about six to nine inches in depth and about 12 inches wide. In all, a total of 3393 nests were counted, in which most nests had one egg but a few had two eggs. Of the six groups, I took measurements of two plots used for nesting. The measurement details of these plots are as follows:

Table 1: Measurements of nesting plots

Sr. No.	Length (mts)	Width (mts)	No. of nests	No. of eggs
Plot no. 1	18.40	18.40	221	180
Plot no. 2	16.30	19.70	265	225

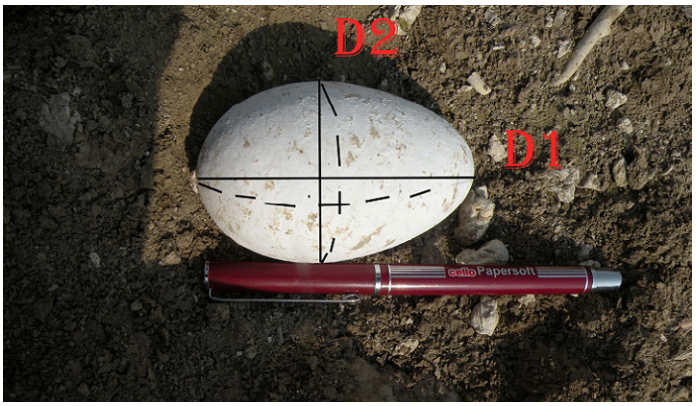

Photo: B. R. Makwana

Since the birds had left the nests and the nesting had failed, we took 25 eggs and took some measurements. The eggs were measured; the measurements - D1 and D2 - as shown in the photo given here were taken. Note that here, D1 and D2 are

Table 2: Egg and nest measurements

Sr. No.	D 1 (cm)	D 2 (cm)	Weight (gms)	Outer upper circumference of nest (in cm)	Height of nest (in cm)	Outer base circumference of nest (in cm)
1	22	16	97	81	18	118
2	23	14.5	76	85	14	98
3	22.5	15.5	85	69	16	141
4	21.5	17	86	81	16	119
5	22	17	96	76	23	106
6	21	15	79	85	16	130
7	21	15	78	91	16	120
8	22	17	96	95	15	102
9	22	16.5	97	110	16	140
10	20	15	80	75	11	108
11	21	16	85	95	15	102
12	22	16	89	75	10	104
13	21	16	81	81	12	101
14	21	16.5	94	97	13	108
15	21	16.5	80	76	14	112
16	21	16	81	81	12	112
17	21	16	75	101	16	108
18	23	17	117	78	14	106
19	22	16.5	87	85	23	122
20	21	15.5	90	95	19	118
21	22	15.5	86	89	16	114
22	20.5	16	86	78	20	108
23	20.5	16	88	102	9	105
24	20.5	16	90	84	17	104
25	21	15.5	79	86	28	108

measurements of both sides of the egg (the perimeter measured horizontally and vertically at the longest and widest point) and is not the length/width as per standard measurements. The weight for these eggs was also taken. Along with the eggs, the nest measurements were taken. It is likely that the when the nests were measured, some erosion to the nests due to rainfall might have happened.

The measurements for these 25 eggs and 25 nests are given in the table.

The average for D1 was 21.42 cm while for D2 was 15.98 cm. The average for outer upper circumference was 86.04 cm, average outer base circumference was 112.56 cm while the average height was 15.6 cm.

Discussion

In 2014, a long time passed between the first and the second rains. As a result, the water level around the nests decreased and it is likely that food became scarce. The adults left the areas, abandoning the nests and the nesting failed. It was also observed that some Steppe Eagles (*Aquila nipalensis*) preyed on the eggs. As explained in Rathwa (2022), the level of water (or the amount of rains) is a critical factor in the breeding success. Sadly, in 2014, due to the long duration between the rains, the water level became too low for nesting to succeed.

The data presented here is one of the few instances where details of the eggs and nests could be measured. It is hoped that this data is useful for researchers and other people engaged in the study of this species.

References

Rathwa, A. K., 2022. Breeding of Lesser Flamingo Phoeniconaias minor in the Little Rann of Kachchh, Gujarat. *Flamingo Gujarat* 5 (3): 1-5 □