



Research Article

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Wintering status of Pink-backed pelican *Pelecanus rufescens* in Gujarat, India.

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Abstract: Present observation was carried out to explore the diversity and abundance of the Pink-backed pelican from the Kachchh, Saurashtra and Gujarat region. Consecutive 7 years from 2007 to 7th October, 2023, every site was observed early morning, roughly at 8:30 to 12 and 3PM to 6PM. Most of birds were juvenile. Abundance and diversity were highest recorded during December and January.

Keywords: Pink-backed pelican, Bird diversity, Bird abundance, Kachchh region, Saurashtra, Gujarat, Juvenile birds

Species Authority: - Gmelin, 1789

Domain: - Eukaryota

Kingdom: - Animalia

Phylum: - Chordata

Class: - Aves

Order: - Pelecaniformes

Family: - Pelecanidae

Genus: - Pelecanus

Scientific name: - *Pelecanus rufescens*

Common name: - Pink-backed Pelican

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INTRODUCTION

The Pink-backed pelican *P. rufescens* is small sized pelican, resembles of White Pelican *p. onocropatus*, but Pink-backed is very small sized and differ in plumage than White pelican. Bird has pinkish-grey bill and gular pouch, black shaft before eye, pink wing coverts are distinguished to White pelican *P. onocropatus* listed as least concern species by international union of Observation of Natural (IUCN). Also making its conservation status of least concern (BirdLife 2013). The species inhabit a wild range of aquatic habits, but prefers to feed in quite back waters and weed grown, lagoon where there is shallow water and immigrant vegetation. Mostly the birds are known to be wader, flew 10 kms around breeding sites, also records are available of out of range in Europe and Israel – Svensson. Occurs in Sub-Saharan Africa, Madagascar and the Southern Red Sea (del hoyo *et al.* 1992). It has an extremely large range with a relatively stable population, making its conservation status of least concern (BirdLife 2013). The species inhabits a wide range of aquatic habitats, but prefers to feed in quite backwaters and weed-grown lagoons (del hoyo *et al.* 1992) where there is shallow water and emergent vegetation (Langrand 1990), generally avoiding steep, vegetated like margins (Nelson 2005). It shows a preference for freshwater lakes, swamps, large slow-flowing rivers, and seasonal pools (Brown *et al.* 1982, Langrand 1990, del hoyo *et al.* 1992, Johnsgard 1993, Nelson 2005), but also frequents reservoirs (Brown *et al.* 1982, Johnsgard 1993), seasonally flooded land (Nelson 2005) and flood-palms near river mouths (Ogilvie 1997). The species tends to roost and breed in

trees (e.g. mangroves), but will also roost on sandy islands, cliffs, coral reefs and sand-dunes (del hoyo *et al.* 1992). Nesting trees are often killed by repeated nesting, which forces breeding colonies to move (although birds will usually not move far) (Brown *et al.* 1982, del Hoyo *et al.* 1992). It is a relatively small pelican compare to other pelicans. The plumage is grey and white, with a pinkish-grey on the back occasionally apparent (never in the deep pink of a flamingo), back tinged pink when breeding (del Hoyo *et al.* 1992). The top of the bill is yellow and the pouch is usually greyish. Breeding adults have long feather plumes on the head. There is a dark spot in front of the eye on the bare skin of the face. This can be used as a diagnostic feature when separating this species from the Great white pelican (Bowker, 2006). The remiges are darker than the rest of the feathers, but not as dark as in the Great White Pelican, and do not show as a clear contrast with the grey body in flight (Ryan 2005). The sighted bird was brownish with a white belly, pale whitish-grey back, rump and abdomen, primaries blackish-brown, bill and pouch grayish pink, naked skin on face greyish-pink with lesser developed black patch in front of eye, and eye iris yellow-brown. The appearance of birds is match with description given for juvenile of Pink-backed pelican by (Borrow & Demey, 2001; Bowker, 2006). Also, care was taken extremely to separate this species from the juveniles or immature of the Great White Pelican and Dalmatin Pelican. This is the first ever sighted record of Pink-backed pelican in Indian continent and to eastern side of its occurrence range. The immature birds are brownish, with a white belly, rump and back and a greyish-white head and neck (Maclean, 1985). Adults have a bright gray to a pinkish-yellow gular pouch and light-yellow

bill. Black lores and thin pale pink skin surround their dark eyes (**Borrow & Demey**, 2001). The bare parts of their body are paler outside and breeding period. Meanwhile, legs can vary in colour, from gray to reddish-orange or yellow but become pinkish red during the breeding season. These birds have feathers on their forehead stretching at the bill's base. Short crest also occurs on the nape (**Bowker**, 2006).

Breed: -

It breeds in sub-Saharan Africa, and known makes regular movements north into sub-Saharan steppes to coincide with the short summer wet season there; local movements are possibly related to water conditions or beginning of breeding; the species can breed all year round, mostly starting late in the rainy season (**del hoyo, Elliott, & Sargatal**, 1992). The annual spring and summer rainfall in the Sahel could well influence northward dispersal to Europe (**Jiguet, Doxa,**

& Robert, 2008). These birds are known to wander a few tens of kilometers around their breeding sites. Nevertheless, pelicans are very good flyers (**Weimerskirch, Martin, Clerquin, Alexandre, & Jiraskova**, 2001) and are able to disperse over large areas (**Izhaki, Shmueli, Arad, Steinberg, & Crivelli**, 2002). It is also extremely mobile, enabling them to feed large distances from their chosen breeding sites, and to disperse far from these areas in the non-breeding season. The bird recorded out-of-range in Europe and Israel from 1980 to 2004, including records from Austria (one bird), Belgium (four), France (28), Germany (nine), Hungary (nine), Israel (three), Italy (24), Luxembourg (one), the Netherlands (one), Norway (two), Poland (one), Spain (14), Switzerland (one) and the United Kingdom (three), but it is never recorded from the Indian region. Also, there is no known record of Pink-backed pelican in captivity in India (**Central Zoo Authority**, 2018) and escape from captivity.

Comparison: -



Figure. A
Pink-backed pelican



Figure. B
Great white pelican

Figure. A - Pinkish-grey bill with gular pouch, black shaft before eye, small crest on nape, pinkish-grey wing coverts, longer primary projection extend up to square ended long black tail. Distinguished from Figure. B.
Figure. B – Bird has pinkish-grey bill, yellowish gular pouch, round at base, whitish wing coverts with long primary extend up to square ended shorter tail.

Observation: -



Figure: 1

Bird is juvenile. Greyish-pink bill with gular pouch, blackish patch front of eye, small crest on white crown, greyish-pink on foreneck, pinkish-grey wing coverts with black primary and secondary, shorter black tail.



Figure: 2

Bird is adult, has a pinkish-grey bill with gular pouch, white skin around orbital ring, small crest on grey crown, pinkish-grey wing coverts, probably it is in winter plumage.



Figure: 3

Pinkish-grey bill, pink gular pouch, yellowish on base, bill tip is yellowish, blackish patch front of eye, white skin around orbital ring, small crest on head, greyish-pink neck and wing coverts, secondary black and primary grey, tail also grey.



Figure: 4

Pinkish-grey bill with gular pouch, blackish patch front of eye, small crest on nape, pinkish-grey wing coverts.



Figure: 5

Bill is very similar to Figure 3, hide neck is grey, mentle is grey, greyish-pink neck and wing coverts, primary and secondary coverts and tail are black.



Figure: 6

It is very similar to Figure 5. Greyish-pink bill, black shaft before eye, white forehead, short crest, greyish nape, mentle greyish, pinkish-grey wing coverts, primary, secondary and tail is black.



Figure: 7

Bird is juvenile. Very similar to Figure 1, 3.



Figure: 8



Figure: 9

Bird is adult. Very similar to Figure 2, 4, 5.



Figure: 10

Bird is in breeding plumage. Very similar to Figure 1, 3.



Figure: 11

Black primary and greyer secondary, square-ended black tail. Former Figure 1, 3.



Figure: 12

Pinkish-grey bill, gular pouch pink, blackish patch front of eye, small crest on crown, pinkish-grey wing coverts, primary, secondary black, greyish left leg and right leg yellowish.



Figure: 13

Very similar to Figure 1, 3.



Figure: 14

Bird is in winter plumage. Very similar to Figure 1, 3. Black primary and tail, greyer secondary, pinkish-grey wing coverts and bill, greyish nape. Both birds are similar.



Figure: 15

Very similar to Figure 1, 3. Pink gular pouch, pinkish-grey bill, black shaft before eye, small crest on nape, pinkish-grey nape and wing coverts, secondary black, primary grey, tail black.



Figure: 16

Pink-orbital ring and pouch, pinkish grey bill, pinkish-grey legs, primary black, secondary grey, tail white.

DISCUSSION

During this observation, 20 birds were sighted and photographed. Maximum birds were recorded at coastal wetland adjusted with Western range of Arabian sea of Gujarat. Only three birds were recorded Inland wetland. Also, vagrant birds were recorded only in western Asia in Israel. It is also does not mention in Birds of South Asia – **Rasmussen**. Not recorded in Birds of South-East Asia – **Robson**. **Ali** 2012, **Krys** 2012, **Grimmett** does not mention in their work. All the records are very important for Indian Ornithology and migration route of Pink-backed Pelican.

All Observations Are Shown in Table

Figure	Date	Site	Sex	Lat. Long.
1	25-12-2007	Thol Birds Sanctuary	Juvenile	23.13° N, 72.4° E
2	31-07-2008	Cherkala	Juvenile	12.51° N, 75.05° E
3	13-12-2009	Jakhoo, Kachchh	Juvenile	23.12° N, 68.71° E
4	16-12-2012	Dholera, Dist. - Ahmedabad	Adult	22.24° N, 72.19° E
5	16-12-2012	Dholera, Dist. - Ahmedabad	Adult	22.24° N, 72.19° E
6	19-01-2012	Fedara, Dist. - Ahmedabad	Juvenile	22.45° N, 72.15° E
7	19-01-2012	Fedara, Dist. - Ahmedabad	Adult	22.45° N, 72.15° E
8	03-01-2015	Dholera, Dist. - Ahmedabad	Juvenile	22.24° N, 72.19° E
9	03-01-2015	Dholera, Dist. - Ahmedabad	Adult	22.24° N, 72.19° E
10	03-01-2015	Dholera, Dist. - Ahmedabad	Juvenile	22.24° N, 72.19° E
11	03-01-2015	Dholera, Dist. - Ahmedabad	Juvenile	22.24° N, 72.19° E
12	03-01-2015	Dholera, Dist. - Ahmedabad	Juvenile	22.24° N, 72.19° E
13	03-01-2015	Dholera, Dist. - Ahmedabad	Adult	22.24° N, 72.19° E
14	03-01-2015	Dholera, Dist. - Ahmedabad	Juvenile	22.24° N, 72.19° E
15	11-11-2021	Vadla, NSBS	Adult	22.93° N, 71.98° E
16	7-11-2023	Near Dharabla Island, NSBS	Juvenile	22.78° N, 72.03° E

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