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Note

SIGHTINGS OF THE GREAT WHITE PELICAN

PELECANUS ONOCROTALUS (LINN. 1758) (AVES:

PELICANIFORMES: PELICANIDAE) IN PALLIKARANAI

MARSHLANDS, TAMIL NADU, INDIA

Kannan Thirunaranan, Samidurai Jayakumar, Sankaranathan Sivaraman & Santhanakrishnan Babu

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SIGHTINGS OF THE GREAT WHITE PELICAN PELECANUS ONOCROTALUS (LINN. 1758) (AVES: PELICANIFORMES: PELICANIDAE) IN PALLIKARANAI MARSHLANDS, TAMIL NADU, INDIA

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Pallikaranai marshland (PML) falls between 12.93770N & 80.20222E and is situated at the Southeastern sub-urban areas of Chennai, Tamil Nadu. The unique ecological set up of the Pallikaranai marsh makes it an ideal site for many resident and migratory birds in Tamil Nadu. This marsh acts as a home to nearly 101 bird species and around 35,000 birds were counted during the peak migratory seasons of birds (December–February 2007). The Pallikaranai marshlands also include seven threatened bird species such as the Spot-billed Pelican *Pelecanus philippensis*, Woolly-necked Stork *Ciconia episcopus*, Black-headed Ibis *Threskiornis melanocephalus*, Pallid Harrier *Circus macrourus*, Great Thick-knee *Esacus recurvirostris*, Black-tailed Godwit *Limosa limosa* and River Tern *Sterna aurantia* (Raj et al.

2010).

As a part of long-term water bird survey in the marshland, on 11 December 2014, at 16:50hr, while watching a flock of Spot-billed Pelicans *Pelecanus philippensis* roosting on *Prosopis juliflora*, we came across a pelican that had features that distinguished it from the rest of the flock. Its bright



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yellow pouch caught our attention, as against the pinkish pouch of the Spot-billed Pelican, as reported by Ali & Ripley (1978). To our surprise, we identified it as the Great White Pelican *Pelecanus onocrotalus*. Before the bird flew away from the roost tree, the first author managed to get pictures using his camera (NIKON D50 with 500 mm NIKOR Tele lens) (Images 1–12). Subsequently, the White Pelican was sighted and photographed many times while foraging, resting and roosting along with other swimming wetland birds. The date and location of the sightings along with GPS coordinates are given in Table 1. Available records of the Great White Pelican's occurrence in Tamil Nadu show that this sighting of Pelican has been the first in Pallikaranai Marshland.

The Great White Pelican *Pelecanus onocrotalus* is a winter visitor to Africa and Asia with two distinct populations, one in eastern Europe and Asia, and the other in Africa (Crivelli 1984; Crivelli et al. 1991). It occurs in scattered colonies or as a migrant in many African countries (Kenya, Sudan and Morocco), Greece, Turkey, Iran; Black, Caspian and Aral Seas; Kazakhstan, Kuwait, India, and Vietnam (Crivelli et al. 1991; Jiguet et al. 2008). In India it occurs from Punjab to Assam (Ali & Ripley 1978), with an exception of a single record

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Table 1. Sightings of the Great White Pelican at Pallikaranai Marshlands

	Date and time of observation	Location	GPS coordinates	Activity	
1	11.xii.2014 - 16.50hr	PML North	12.94831N & 80.21049E	Roosting on <i>Prosopis</i> tree	
2	28.xii.2014 - 12.34hr	PML West	12.92829N & 80.21843E	Resting at Shallow water	
3	09.vi.2015 - 17.42hr	PML Radial Road	12.94976N & 80.23092E	Roosting on electric post along with Spot-billed Pelican	
4	04.vii.2015 - 12.20hr	PML Side Canal	12.90376N & 80.21262E	Resting on rocky shore along with Painted Stork and Spot-billed Pelican	
5	05.vii.2015 - 11.28hr	PML Side Canal	12.90376N & 80.21262E	Fishing along with Common Coots	
6	06.vii.2015 - 17.46hr	PML Perumbakkam	12.90100N & 80.22392E	Preening along with Spot-billed Pelican	
7	07.vii.2015 - 07.38hr	PML Southern Side Canal	12.90376N & 80.21262E	Co-operative fishing along with Spot-billed Pelican	
8	09.vii.2015 - 08.21hr	PML Southern Side Canal	12.90376N & 80.21262E	Eating a large fish using jugular pouch	
9	10.vii.2015 - 07.02hr	PML Southern Side Canal	12.90376N & 80.21262E	Fishing along with Spot-billed Pelican	
10	15.vii.2015 - 07.54hr	PML Southern Side Canal	12.90376N & 80.21262E	Preening while swimming	
11	16.vii.2015 - 07.05hr	PML Southern Side Canal	12.90376N & 80.21262E	Eating fish using jugular pouch	
12	19.vii.2015 - 08.02hr	PML Southern Side Canal	12.90376N & 80.21262E	Foraging along with Spot-billed Pelican and Little Cormorants	

from southern India (Grimmett et al. 1999). Ali (1960) recorded the nesting of the Great White Pelican in the Rann of Kutch in 1960; however, Tiwari et al. (2003) reported the presence of first year juveniles along with adult Great White Pelican in the Kutch region, but could not prove its breeding. Very few wintering records of this species are available from southern India. Eight individuals were recorded at Vellimukkuchali swamp in Kerala (Jacob et al. 1995), an isolated record from Udupi District, Karnataka (Gopalakrishnan & Pushpalatha 2003), a pair observed at Kolleru Lake, Andhra Pradesh (Taher & Mani 2008) and a single pelican observed at Uppalapadu, Andhra Pradesh (Sheeba & Vijayan 2008). A consolidated checklist of birds in the Pallikaranai wetlands was made by Raj et al. (2010), however, they did not sight the White Pelican during their study period (February-August 2010). The Vedanthangal Bird Sanctuary situated near the Pallikaranai marsh, Tamil Nadu is yet another important breeding ground for several species of wetland birds. Nevertheless, during an intensive study in this area between 2007 and 2010, the Great White Pelican was never sighted (Jayakumar 2013). In the recent past (since 2011), the Great White Pelican started visiting the wetlands found in and around Chennai and Chengalpattu areas. Therefore, the available literature on this species indicates that this sighting could be considered as a new winter distribution range for this species in India.

The Great White Pelican is associated with relatively large, warm, shallow fresh, brackish, alkaline or saline lakes, lagoons, marshes broad rivers, deltas (Ali 1960; Ali & Ripley 1987; del Hoyo et al. 1992; Johnsgard 1993; Vijayan et al. 2004), estuaries and coasts of landlocked

seas (Snow & Perrins, 1998). Earlier sightings of this species in India also indicate that they are habitat specialists and largely depend on open water areas. The Pallikaranai marshland has vast open water area with limited floating vegetation and therefore serves as a suitable foraging ground for many swimming birds including the Spot-billed Pelican (1400 individuals). As its occurrence was documented through a single individual sighting, further monitoring and surveillance in and around the marsh during winter is very much needed to establish whether its occurrence at Pallikaranai was accidental or regular. Further, protection of this urban wetland would not only help in sustaining regular migratory birds but also irregular birds like the White Pelican.

The Chennai City waste dump yard occupies a part of these wetlands, and it has effectively polluted the prime marshlands. Realizing the environmental and ecological significance of the area in an expanding metropolis, the government of Tamil Nadu (Gazette notification GO. Ms. No. 52, dated 09 April 2007), declared a part of the Pallikaranai Marsh (317.00ha) as a reserve forest (under section 4 of the Tamil Nadu Forest Act, 1882) in order to stall further conversion and protect the urban wetland (Azeez et al. 2007). Therefore, systematic research and monitoring, and serious action plans are very much essential to conserve this wetland in a sustained manner.

References

Ali, S. & S.D. Ripley (1978). Handbook of The Birds of India and Pakistan Together with those of Bangladesh, Nepal, Bhutan and Sri Lanka. Diverse to Hawks. Vol 1. 2nd Edition. Oxford University Press, Delhi.



Images 1–12. Photographic evidences of the Great White Pelican sighted at Pallikaranai Marshland; photographs listed as per the serial numbers given in Table 1 (© K.V.R.K. Thirunaranan)

- Ali, S. & S.D. Ripley (1987). Compact Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Srilanka. Diverse to Hawks. Vol 1. 2nd Edition. Oxford University Press. Delhi.
- Ali, S. (1960). 'Flamingo City' revisited: nesting of the Rosy Pelican Pelecanus onocrotalus Linnaeus in the Rann of Kutch. Journal of Bombay Natural History Society 57(2): 412–415.
- Azeez, P.A., S. Bhupathy, J. Ranjini, R. Dhanya & P.P.N. Raj (2007).

 Management Plan for the Eco-restoration of Pallikaranai Reserve
 Forest. Salim Ali Centre for Ornithology and Natural History,
 Coimbatore, 62pp.
- Crivelli, A.J. (1984). Status of the Pelecanidae. *Biological Conservation* 30: 147–156.
- Crivelli, A.J., G. Catsadorakis, H. Jerrentrup, D. Hatzilacos & T. Michev (1991). Conservation and management of pelicans nesting in the Palearctic, pp. 137–152. In: Salathé, T. (ed.). Conservation of Migratory Birds. International Council for Bird Preservation, Cambridge, U.K.
- del Hoyo, J., A. Elliot & J. Sargatal (1992). Handbook of the Birds of the World, Vol. 1: Ostrich to Ducks. Lynx Edicions, Barcelona, Spain.
- Gopalakrishna, B. & B. Pushpalatha (2003). Rare sighting record of Great White Pelican in Udupi District of Karnataka State. *Newsletter for Birdwatchers* 43(6): 92.
- **Grimmett, R., C. Inskipp & T. Inskipp (1999).** Pocket Guide to The Birds of the Indian Subcontinent. Oxford University Press, New Delhi.
- Jacob, T.J., P. Pramod, K. Gangadharan & M. Mahesh (1995). First record of the Rosy Pelican *Pelecanus onocrotalus* Linnaeus in Kerala. *Journal of the Bombay Natural History Society* 91(3): 452.

- Jayakumar, S. (2013). Organochlorine pesticides, population and reproductive success of fish-eating birds in select heronries in Tamil Nadu. PhD Thesis, Bharathiar University, Coimbatore (unpublished).
- Jiguet, F., A, Doxa & A. Robert (2008). The origin of out-of-range pelicans in Europe: wild bird dispersal or zoo escapes? *Ibis* 150: 606–618
- **Johnsgard, P.A. (1993).** Cormorants, Darters, and Pelicans of The World. Smithsonian Institution Press, Washington.
- Raj, P.P.N., J. Ranjini, R. Dhanya, J. Subramaniyan, P.A. Azeez & S. Bhupathy (2010). Consolidated checklist of birds in the Pallikaranai Wetlands, Chennai, India. *Journal of Threatened Taxa* 2(8): 1114–1118; http://doi.org/10.11609/JoTT.o2220.1114-8
- Sheeba, N. & L. Vijayan (2009). Record of the Great White Pelican Pelecanus onocrotalus from Uppalapadu, Andhra Pradesh, India. Indian Birds 5(1): 17–18.
- Snow, D.W. & C.M. Perrins (1998). The Birds of the Western Palearctic, Volume 1: Non-Passerines. Oxford University Press, Oxford.
- Taher, H. & U. Mani (2008). Sighting of the Great White Pelican Pelecanusonocrotalus at Kolleru Wildlife Sanctuary Andhra Pradesh, India. Indian Birds 4(1): 14.
- Tiwari, J.K., J.C. Alain & S.N. Varu (2003). Status and distribution of Pelicans in Kutch District of Gujarat. *Newsletter for Birdwatchers* 43 (2): 22.
- Vijayan, V.S., S.N., Prasad, L. Vijayan & S. Muralidharan (2004). Inland Wetlands of India: Conservation Priorities. Sálim Ali Centre for Ornithology and Natural History, Coimbatore.





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