

Nesting of the Spot-billed Duck *Anas poecilorhyncha* in Chennai city

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Introduction

The Indian Spot-billed Duck *Anas poecilorhyncha* is one of the resident species of ducks that occurs in Chennai. It is a widespread resident of India and is frequently spotted at, “freshwater marshes, lakes, irrigation tanks and pools with extensive emergent vegetation,” (Grimmett *et al.* 2011). It is fairly common, and is protected under The Indian Wildlife (Protection) Act, 1972 (Rahmani & Islam 2008).

Pallikaranai is a large marsh, about 50 km² in extent (Vencatesan 2007), which was originally supplied by runoff from surrounding areas but now receives sewage and domestic waste from Chennai and its suburbs. The flora of the region is dominated by hydrophytes adapted to high levels of water, and high salt content (Patnaik & Narayanan 2007).

On 26 January 2014 [44], we observed, and photographed, a female Spot-billed Duck with nine ducklings, just a few days old in the Pallikaranai Marsh on the southern fringes of Chennai city. Eleven ducklings were seen with a pair at the same site, two weeks later, on 08 February 2014 [45].



44. Spot-billed Duck with nine ducklings.



45. Spot-billed Duck with eleven ducklings.

Photos: Rajaram V.

Though considered resident, records of breeding Spot-billed Ducks from Tamil Nadu are fairly scanty. None of the earlier works provide any specific details on the nesting of this species in the state (Jerdon 1864; Hume 1875; Baker 1929; Baker & Inglis 1930). Even contemporary works, such as Ali & Ripley (1983), Kazmierczak (2000), Rasmussen & Anderton (2005), and Grimmett *et al.* (1998, 2011), while treating the species as a year-round resident in the larger part of peninsular India, do not provide specific data on its breeding localities or any other related information. Rathnam (2002) laments the paucity of nesting records from the state. Grubh & Grubh (2012) too are silent about its breeding.

A brief review of nesting localities in Tamil Nadu

A detailed review of other existing literature was undertaken to locate breeding records from Tamil Nadu, particularly from the vicinity of Chennai. Dewar (1905) includes this bird in his Madras (=Chennai) list but is silent about its status and about its breeding. Santharam (*pers. comm.*, verbal, undated) never saw any signs of its breeding in the city or its environs between 1978–1998, but mentions its reported nesting in the Padappai area based on his discussions with the late E. R. C. Davidar (1922–2010). However, since 2006, there have been a few nesting reports from Chennai, which are presented in Table 1.

Elsewhere in the state, Rahmani & Islam (2008) refer to some historical nesting records from the Kodaikanal-, and Berijam Lakes in the Palni Hills. The Spot-billed Duck has been observed in, and been considered a resident of the Mudumalai Tiger Reserve, and Udhagamandalam (=Ooty), in the Nilgiris by Vasanthan & Srivatsava (undated), who do not provide any further details of the nesting. There is a recent report that it breeds in Thiruvannamalai (along with a photograph of an adult with ten ducklings), approximately 200 km south of Chennai (Anonymous 2011). Breeding has also been recorded at the Sriharikota Island, Nellore District, Andhra Pradesh (Sivakumar & Manakadan 2005; Kannan *et al.* 2009), which is less than 100 km north of Chennai.

Breeding season

Most authors mention that in southern India the Spot-billed Duck breeds during the North-eastern Monsoon, usually between November and December (Hume 1875; Baker 1929; Baker & Inglis 1930; Ali & Ripley 1983; Rasmussen & Anderton 2005; Sivakumar & Manakadan 2005; Anonymous 2011). Alternatively, Sathan & Pandi (2009) offer data that breeding occurs till June, rather than

Table 1. Breeding Records of the Spot-billed duck *Anas poecilorhyncha* in Chennai

Site of observation	Date	Details	Reference
Pallikaranai Marsh	19 October 2006	Adult pair with 3 chicks	Chandrasekar (2006)
Pallikaranai Marsh	Not Available	Female and 11 chicks	Sivakumar (2011)
Pallikaranai Marsh	15 September 2012	Pair with 5 juveniles	(Observed by Balaji Rayadurgan) - Gnanaskandan (2014)
Perumbakkam / Sholinganallur Marsh	07 April 2013	Pair with 3 juveniles	Gnanaskandan (2014)
Amarambedu Lake	19 September 2013	4 Immature/subadult	Gnanaskandan (2014)
Pallikaranai Marsh	26 January 2014	Female with 9 chicks	This study
Pallikaranai Marsh	08 February 2014	Pair with 11 chicks	This study

December. In northern India breeding coincides with the South-western Monsoons (Ali & Ripley 1983; Grimmett *et al.* 1998; Madge & Burn 1988). The sightings of ducklings in Chennai have all been between October and February (see Table 1).

The Spot-billed Duck is known to nest in marshy margins of freshwater bodies in a pad of grass and weeds. Its clutch consists of six to 12 eggs, but usually comprises seven to nine (Ali & Ripley 1983). Sivakumar's (2011), and our, records show that the number of chicks is closer to 11, but Chandrasekar's (2006), and Gnanaskandan's (2014), reports mention an average of four.

Conclusion

It is possible that the Spot-billed Duck may have historically been a regular breeder in Chennai, but has probably been noticed breeding, more frequently, in recent years due to the increase in the number of birders who also have better access to remoter areas with increased availability of private transport. New roads, laid over the last decade, have also provided better access to the Pallikaranai marshes, allowing birders to visit frequently, and note the birdlife in greater detail; perhaps another reason for the spurt in reports of new breeding records of this species at Chennai.

Based on this short study, we feel there is an urgent need to document details of breeding of common birds that are presumed to be resident in areas without substantial evidence of their breeding localities, habitats, and season. Birders in India, and particularly in Tamil Nadu, should begin to record such details of bird biology. Data collected will be useful not only to understand the biology of species, but also help in identifying, and conserving, suitable habitats needed for their survival, especially as many habitats, such as Pallikaranai, are under constant threat from rapid urbanisation, and other human activities.

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