

Sighting of the Critically Endangered Christmas Island Frigatebird off Chombala Coast, Kerala



Christmas Island Frigate Bird ©Abdulla Paleri.

Christmas Island Frigatebird *Fregata andrewsi* in the nonbreeding season is found in many parts of Indonesia, Malaysia, Thailand, and occurs as a vagrant in Andaman & Nicobar Island, & southern India. Some rare sightings from Australia and another from Kenya (Orta 1992; Wells 1999; BirdLife International 2001) have been recorded.

This is a Critically Endangered (BirdLife International 2013) sea bird and an endemic breeder in Christmas Island (10°25S, 105°40E), in the eastern Indian Ocean, about 360 km south of Java, Indonesia (Francisca & Janos 2015). The population census shows that there are 2,400–4,800 adult individuals

(Stokes 1988; James 2003). There are about 600 pairs of breeding birds and the population has declined severely by 66% over three generations (BirdLife International 2014). The possible threats being faced by the bird away from its breeding site were studied and the main threats recorded were entanglement in fishing gear, capture and attachment of string to the leg, poisoning/ sedating, and shooting (Francisca & Janos 2015). The status and threats the bird faces show that the sighting and observation of the bird anywhere has great significance to chalk out new plans and to revise the existing plans for the effective management and protection of this critically endangered species.

Sight records in India

The sight record of this bird from India had not been confirmed for long. Ali & Ripley (1983) emphasized that there was no authentic sight record of this bird from India. A specimen from Kollam, Kerala (Prater 1929) and another one from Sri Lanka were identified as this species but later they were confirmed as Lesser Frigatebird *Fregata minor* (Abdulali 1961; Philips 1953).

A juvenile bird was reported to have been sighted from Andamans (Saxena 1994) but remained unconfirmed. Other reports from Kerala (Prater 1929; Pillai 1964; Kumar & Kumar 1997) are not substantiated. Santharam (1982) from Tamil Nadu and Dwarakanath (1981) from Karnataka are misreported. But a specimen recovered (2006) from Parganas District of West Bengal and now kept in ZSI Kolkata was identified as *F. andrewsi* (Sen 2011). Ankola, Karnataka (eBird 2014), Lakkavalli, Karnataka (eBird 2018) are the other sighting records. There is only one confirmed record from Alapuzha, Kerala (eBird 2014).

The present observation has been made from the Arabian Sea off Chombala coast (11.6684 °N, 75.5588 °E) in the Kozhikode District, Kerala. On 29 June 2019, at 0700 h, a few local fishermen who returned from the Arabian Sea after fishing brought an immature frigatebird to the shore of Chombala fishing harbour. The bird was found bleeding from a wound in the chest. According to the fishermen, the bird flew into their boat and was unable to fly away

due to the injury it sustained. According to the fisherfolk, the boat was approximately 1 km away from the shore and the nature and cause of the injury of the bird were unknown. The bird was taken to the nearby veterinary hospital for treatment. After the bleeding was arrested by the veterinary treatment, the bird was brought to the Regional Forest Office for further care. The bird was kept in the cage was seen flapping its wings but unable to open the wings fully enough to fly.

The bird was given small marine fish and water for drinking but it did neither eat nor drink. A few hours later on the same day the bird was taken to the Kerala Veterinary and Animal Sciences University, Pookodu, Wayanad District, 70km away from the forest office where the bird was initially kept. The bird did not respond to the medicines and care given at the Animal Sciences Center and died on 5 July 2019. Postmortem report showed that the bird died of a deep wound in the chest that led to the fracture of the sternum and a few rib bones.

At the first look itself, it was identified as an immature Frigatebird, *Fregata* sp. To confirm the identification up to species level, the photographs of the bird were uploaded in the various bird identification groups. Three expert birders (Sean Minns of Britain, Andrew Paul Bailey of Bulgaria, and Klaus Malling Olsen of Denmark) commented that most probably the bird was an immature Christmas Island Frigatebird, *Fregata andrewsi*. To further confirm the identification up to species level, the images

of the bird were sent to the leading Christmas Island Frigatebird expert David James of Australia. He confirmed the bird was a first cycle Christmas Island Frigate bird, *Frigata andrewsi*. He made the following comments on the images of the bird:

- “The bird is in first cycle plumage. The rufous feathers on the chest are formative plumage acquired in the partial pre-formative (post-juvenile) moult, which begins around the time of fledging.
- The pre-formative moult distorts the shape of the breast band making it harder to use the belly shape for identification, as the moult progresses. The shape of the belly patch is difficult to determine in all the photos.
- There is a slight nuchal crest. Great and Lesser Frigatebirds never have a nuchal crest. It is a prominent feature of adult Christmas and is present in its first stage of the bird, although less developed. This is probably diagnostic.
- There are small pure white patches on the scapulars. I have never seen these on any frigatebird except adult Christmas. They are rare in adults. It seems they must also occur on first cycle birds (and probably all other ages) as a rare feature. However, it might be an effect of feather displacement due to handling.
- The white belly patch extends well behind the base of the legs, which is typical of Christmas in the first cycle.
- The fringes of the alar bar are not especially prominent and there is no scaling on the mantle (correlated features). Some Christmas (probably females) show extremely pale alar bars and extensive pale fringes on the mantle but others do not (probably males). This feature does not eliminate Christmas.
- Axillary spurs occur in all three Asian species and can be diagnostic. They are variable, however. The axillary spur seems to be confined to the body; they certainly do not extend far into the underwing coverts. Short spurs can mean either Great or Christmas. Ragged spurs usually mean Christmas. However, the photos do not show this feature clearly, and it is difficult to know how much the feathers are disturbed and out of position.
- The bill appears to be very long. However, judging such things by the eye is ill-advised.
- In summary, the most important feature appears to be the crest feathers. Without these, I think the identification would be very uncertain.”

Finally, examining the video and the images later, he sent the conclusion as follows:

“I have looked at the white patches on the scapulars. Therefore, there are two features that are diagnostic of Christmas Frigatebird. Slightly elongated nape feathers form a messy nuchal crest and an irregular white patch on the upper scapulars on each side. Thus, it is a Christmas Frigatebird. Great and Lesser frigatebirds are safely ruled out”.

There are five species of Frigatebirds out of which three species *Fregata minor*, *F. ariel*, and *F. andrewsi* have been reported from the Indian subcontinent (Ramussen & Anderton 2012; Grimmett et al. 2016). *F. minor* and *F. ariel* reported from Kerala are accidental straggler or storm-driven in the monsoon season (Ali 1969). Similarly, the *F. andrewsi* reported from Kerala including the present one might be storm blown during the monsoon season. The exact cause of the incident that wounded the bird is unknown but most probably it could be due to the flight hit against a ship or boat in the sea. The bird in the first-cycle plumage would not be so strong as to fly avoiding the obstacles on its way. Besides, the wind would be very strong forcing the bird to deviate from its flight direction and consequent flight control.

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