

What is the specific identity of the frigatebird *Fregata* sp., in the collection of the Zoological Survey of India, Kolkata, India?

Gopinathan Maheswaran & Imran Alam

Maheswaran, G., & Alam, I., 2014. What is the specific identity of the frigatebird *Fregata* sp., in the collection of the Zoological Survey of India, Kolkata, India? *Indian BIRDS* 9 (4): 97–99.

Gopinathan Maheswaran, Zoological Survey of India, M-Block, New Alipore, Kolkata 700053, West Bengal, India. Email: gmaheswaran@yahoo.com

Imran Alam, Zoological Survey of India, M-Block, New Alipore, Kolkata 700053, West Bengal, India.

Manuscript received on 16 December 2013.

Introduction

A frigatebird *Fregata* sp., was recovered on 31 May 2006 from Basirhat (22°38'N, 88°52'E), North 24 Parganas, West Bengal, India (Fig. 1), and deposited in the National Zoological Collections (henceforth, NZC) of the Zoological Survey of India (henceforth, ZSI), Kolkata, India. The bird was probably a victim of heavy winds from the Bay of Bengal, becoming disoriented and blown 70km inland, where it was recovered in a fatigued condition but died later on probably after its arrival at ZSI. It is the subject of two pictures taken by V. K. Yadav, and uploaded to the Oriental Bird Images website (http://orientalbirdimages.org/search.php?p=41&Bird_ID=1175&Bird_Family_ID=&pagesize=1; http://orientalbirdimages.org/search.php?p=42&Bird_ID=1175&Bird_Family_ID=&pagesize=1) wherein its identity is provisionally stated as Christmas Island Frigatebird based on '...careful measurements at the ZSI...'. Those measurements have not yet been published. Its picture, and the accompanying text uploaded to the website, 'Birds of India' (<http://www.kolkatabirds.com/pelagicstrays.htm>), quotes David James (dated 18 July 2011), 'That does indeed look like a CI frigatebird,' (Sen 2011).¹ Based on these sources, this juvenile Christmas Island Frigatebird *Fregata andrewsi* has been included in Rahmani (2012), and Praveen *et al.* (2013), who included it amongst their lists of India's threatened birds, and Indian rarities, respectively. However, the specific identity of this specimen is unresolved.



Fig. 1. Map showing the place from where the juvenile frigate bird was recovered from West Bengal.

Through this note, we clarify the specific identity of this specimen, and argue against the stand taken by earlier online and print references.

History

A few local birders helped N.R. Mishra, Assistant Wildlife Warden, West Bengal Forest Department, to bring the dead frigatebird to the ZSI where Dr. Shreekumar Chatterjee, who was in charge of the Wildlife Section at that time, recorded it as a 'Christmas Island Frigatebird', in the General Register of the Wildlife Section. Astonishingly, he did not label it with details such as genus and species name, date and place of collection. We began looking for the specimen in March 2013, finally locating the bird in the Wildlife Section of ZSI on 06 August 2013. We brought it to the Bird Section for identification and registered it on 12 August 2013 in the 'Register of Named Collections kept in Bird Section', bearing Registration Number 41300/AVES.

Identification

Harrison (1983) elucidates the apparent difficulty in identifying this group of seabirds. According to James (2004), this problem is more acute in the Oriental Region where three species of Fregatidae occur: Christmas Island Frigatebird, Great Frigatebird *F. minor*, and Lesser Frigatebird *F. ariel*. Great- and Lesser-Frigatebirds have been reported sporadically from Indian coasts (Rasmussen & Anderton 2012; Praveen *et al.* 2013), but mainly from the western coast (Prasad 2006; Sashikumar *et al.* 2011). The specimen could have been misidentified just because this species has not been reported from West Bengal coast earlier, and the possible presence of the other two species of frigatebirds in the region as reported by James (2004). Secondly, published literature on the species, prior to James (2004), had very little information, and in some instances had even misreported (James 2004) the facts, creating greater confusion. The only publication, with clear photos depicting the characters of three species, for proper identification, is James' (2004) paper. It is arguably the best available, till date, for field identification of these three species of frigatebirds. And only Valle *et al.* (2006) shows such characters, as photographed by James (2004) for proper comparison and identification with museum specimens, wherein information about Great

¹ Editors of *Indian BIRDS* have been unsuccessful in tracking this particular communication despite attempts to trace the email from ornithologists involved in analyzing this particular specimen.

Frigatebird's plumage characteristics are dealt with clearly based on the long term studies conducted in the Galapagos Island. According to James (2004), the Oriental Region is the only region where three species are regularly recorded together; nonetheless the identification to species level is a real challenge because of the similarity between the species and the large number of different plumages within each group.

Description

The specimen of Frigatebird available with ZSI is definitely a juvenile and probably of first year bird because, there is a pale and tawny head and white breast separated by a dark brown breast-band [126] narrower in centre (Rasmussen & Anderton 2012) and white belly patch almost round in anterior region and getting narrower in its posterior region ending in cloaca. It seems that, while preserving the bird's lower belly, portion at the posterior had been removed for inserting preservatives and cotton to give a proper shape to the specimen. The alar bars are prominent but buff in colour [127] and not entirely white as in the case of Christmas Island (James 2004). The buff colour of the alar bars, the rounded (not angular) shape to the posterior of the belly patch, and the absence of axillary spurs match the characters of Great and not Christmas Island Frigatebird. No effort was made to sex the individual as the main aim of this article is to identify the species.



126. Showing white belly and the dark rufous brown breast band that gets narrow in the centre.



127. Showing broad and buff colour alar patch in the left wing of the Great Frigatebird.

Size

The culmen of the specimen in the ZSI is exactly 101 mm [128] and this matches with what James (2004) has mentioned for the male Great Frigate (96–104 mm) in contrast with 111 mm and 132 mm in the case of adult male and female Christmas Island Frigatebird. The following table shows the measurement of the specimen of frigatebird in the ZSI. It may be noted that wings are hard to measure accurately as the feathers are quite curved and hence the same is presented only for the purpose of completeness.



128. Showing pale buff head and moderately long culmen.

Tail	Wing	Head	Culmen
360 mm	660 mm	160 mm	101 mm

According to James (2004), Great Frigatebird's average measurements are smaller than Christmas Island but show considerable geographic variations in size.

Plumage characters

We do not see any white spur in the axillary region. Due to stiffness and fragile condition of the specimen, we did not stretch it fully to take a picture. But, careful examination did not reveal any axially spur on both wings. According to James (2004), axillary spur is generally present in all plumages in Great and Christmas Island but not in all individuals in the case of Christmas Island. However, in the case of Great, only in the proportion of juveniles, one can see the axillary spurs and not in the majority of birds. Hence, this provides an additional substantiation for this specimen to be a Great rather than Christmas Island Frigatebird. Furthermore, the bird in possession of ZSI has a dark brown breast-band, white belly patch and buff pale head. The shape of the belly patch is almost oval (in posterior) except a small brown feather (of breast band) that extends into the white belly giving a near diamond shape white belly that extends slightly into the rufous breast-band. But the rear end of the belly patch is presumed to be narrow in the posterior region if one hides the cotton placed in the belly and draw a line along the periphery of the oval shaped white belly patch thereby revealing a shape as mentioned in James (2004) for Great Frigatebird.

In summary, morphometric data and plumage details we have collected favour Great rather than Christmas Island Frigatebird. It is difficult to be 100% sure that it is not a Christmas Island but

most likely it is not the case (David James *pers. comm.* April, 2014). Frigatebirds records from the eastern seaboard of India are very few and this is the first record of this genus from West Bengal. As this specimen was the sole basis for the inclusion of Christmas Island Frigatebird in the Indian checklist (Praveen *et al.* 2013), we propose that the species be rejected from the same and it should also not figure in the list of threatened birds of India.

Acknowledgements

We thank K. Venkataraman, Director, Zoological Survey of India, for his encouragement and support, and the Bird Section staff at ZSI for their assistance.

References

Harrison, P., 1983. *Seabirds: An identification guide*. 1st ed. London & Wellington: Croom Helm Limited & A.H. and A.W. Reed Ltd. Pp. 1–448.
James, D. J., 2004. Identification of Christmas Island, Great and Lesser Frigatebirds.

BirdingASIA 1: 22–38.
Prasad, A., 2006. *Birds of western Maharashtra. A reference guide*. 1st ed. Mapusa, Goa: Other India Press. Pp. 1–315.
Praveen J., Jayapal, R., & Pittie, A., 2013. Notes on Indian rarities–1: Seabirds. *Indian BIRDS* 8 (5): 113–125.
Rahmani, A. R., 2012. *Threatened birds of India: their conservation requirements*. Mumbai: Indian Bird Conservation Network; Bombay Natural History Society; Royal Society for the Protection of Birds; BirdLife International; Oxford University Press. Pp. i–xvi, 1–864.
Rasmussen, P. C., & Anderton, J. C., 2012. *Birds of South Asia: the Ripley guide*. 2nd ed. Washington, D.C. and Barcelona: Smithsonian Institution and Lynx Edicions. 2 vols. Pp. 1–378; 1–683.
Sashikumar, C., Praveen J., Palot, M. J., & Nameer, P. O., 2011. *Birds of Kerala: status and distribution*. 1st ed. Kottayam, Kerala: DC Books. Pp. 1–835.
Sen, S., 2011. Pelagic vagrants: East coast of India. Website: <http://www.kolkatabirds.com/pelagicstrays.htm>. [Accessed on 1 April, 2014.]
Valle, C.A., de Vries, T., & Hernández, C., 2006. Plumage and sexual maturation in the Great Frigatebird *Fregata minor* in the Galapagos Islands. *Marine Ornithology* 34: 51–59.

Sighting of Red-breasted Goose *Branta ruficollis* at Ganga Barrage, Bijnor, Uttar Pradesh

Rajesh Panwar & Sheela Panwar

Panwar, R., & Panwar, S., 2014. Sighting of Red-breasted Goose *Branta ruficollis* at Ganga Barrage, Bijnor, Uttar Pradesh. *Indian BIRDS* 9 (4): 99–100.
Rajesh Panwar, Ward No.1, Kaladhungi, Nainital, Uttarakhand, India. Email: rajesh@milieuhospitality.in [RP]
Sheela Panwar, Ward No.1, Kaladhungi, Nainital, Uttarakhand, India. Email: sheela@milieuhospitality.in [SP]
Manuscript received on 25 March 2014.

The Red-breasted Goose *Branta ruficollis* is one of the most attractive geese in the world, but it is also one of the rarest, and is listed as Endangered by the IUCN (BirdLife International 2014). It breeds on the Taimyr, Gydan, and Yamal peninsulas of Russia, and winters along the western coast of the Black Sea, at certain favourite spots in Bulgaria, Romania, and Ukraine while small numbers also winter in Azerbaijan. Though this bird figured in several checklists of birds of India (see below), recent works (Grimmett *et al.* 2011; Rasmussen & Anderton 2012) have listed it as hypothetical.

On 13 March 2014 we were casually birding while going to our native village in Saharanpur District, Uttar Pradesh. We took a detour from the Ganga Barrage, which is about 12 kms from Bijnor, a district headquarter of Uttar Pradesh (29°22'N, 78°02'E; c. 220 m above MSL), to watch flocks of Bar-headed Geese *Anser indicus* and other waterfowl in adjacent swampy meadows. We saw hundreds of Bar-headed Geese and spotted a Greater White-fronted Goose *A. albifrons* in a big flock of the former. As we were returning from the site, SP spotted a different bird in another flock of Bar-headed Geese, which was foraging



129–130. Male Red-breasted Goose foraging with Bar-headed Geese at near Ganga Barrage, Bijnor, Uttar Pradesh. Photo: R. Panwar.