First confirmed sighting of a Great Frigatebird within the Hunter Region, NSW

Adam Fawcett¹, Ian Benson² and Mick Roderick³

¹PO Box 1202, Armidale NSW 2350, Australia <u>adam.m.fawcett@gmail.com</u>
² 51 Morehead Street, North Lambton NSW 2299, Australia <u>iaos@hotmail.com</u>
³ 246 Maryland Drive, Maryland NSW 2287, Australia <u>mick.roderick@birdlife.org.au</u>

Received 26 January 2024, accepted 19 February 2024, published online 10 May 2024

An adult female Great Frigatebird *Fregata minor* was observed in Newcastle Harbour, New South Wales, on 7 January 2015. It was also sighted the following day by a number of local observers before its assumed departure. At that time, it was the fourth confirmed record of the species in NSW. The bird was likely to have originated from the eastern Pacific population (subspecies *ridgwayi*) based on the colour of the beak and orbital ring. This appears to be the first record of that subspecies for NSW.

INTRODUCTION

The Great Frigatebird *Fregata minor* is a large seabird that is highly adapted as an aerial feeder (Marchant & Higgins 1990; Weimerskirch *et al.* 2003). The global population occurs across tropical and sub-tropical parts of the Indian and Pacific Oceans (Marchant & Higgins 1990) consisting of five subspecies (Gill *et al.* 2024). Within Australia, the general range of the Great Frigatebird is from the Timor Sea east through the Coral Sea to K'gari (Fraser Island), with occasional sightings south to Brisbane and into NSW (Marchant & Higgins 1990).

Here we document the presence of an adult female Great Frigatebird within Newcastle Harbour in January 2015. At the time of this sighting, there were three accepted records of the species in NSW assessed by the NSW Ornithological Records Appraisal Committee (NSW ORAC), with several documented accounts prior to the formation of NSW ORAC in 1992 (NSW ORAC 2016). The details of this sighting were submitted to NSW ORAC (as NSW ORAC Case no. 638) and the record was accepted (NSW ORAC 2023).

THE SIGHTING

From around 1300 h on 7 January 2015, two observers at separate locations noticed a frigatebird flying around Newcastle Harbour (J. Cockerell pers. comm.; L. Grenadier pers. comm.). At the time the bird could not be identified to species level.

About three hours after those initial sightings, the bird was watched at close range by two of the authors, one (AF) from the north-eastern side of the harbour at Stockton, and the other (IB) from the south-western side, at Carrington. Both authors monitored the bird for close to an hour from 1600 h as it moved backwards and forwards along the Hunter River between the two observation points. Using binoculars and spotting scopes, they were able to identify the bird as a female Great Frigatebird based on diagnostic features with reference to relevant field guides (Slater et al. 2009; Morcombe & Stewart 2014; Pizzey et al. 2012). Following the initial identification, the bird was observed (MR) and photographed at close range at 1800 h near Nobbys Beach and Lighthouse. The locations of the observation points are shown in Figure 1.

On 8 January 2015, the bird was seen by the authors and several local birders (A. Richardson pers. comm.; L. Mee pers. comm.; J. Goswell pers. comm.), continuing to soar around Nobbys Lighthouse and parts of the lower Newcastle Harbour. The bird was last observed around midday on 8 January 2015.

Conditions during both days were clear with no cloud or rain and good visibility. Winds were strongly onshore from the east at 28 knots gusting to 32 knots. Both of the viewing points used by the authors for the identification had good sight lines that were not impaired by infrastructure or glare from the sun.



Figure 1. Observation locations of Great Frigatebird in Newcastle Harbour, 7 January 2015.



Figure 2: Ventral, side-on view showing the sullied grey throat, lack of spurs on the underwing, white belly with a rounded demarcation to the black at the rear of the underparts. Note also the pink eye ring. (Photo: Allan Richardson)



Figure 3: Ventral view showing all of the features noted in Figure 2, but with a clearer view of the sullied grey throat. (Photo: Allan Richardson)



Figure 4: Ventral view in stronger light. All features noted in the previous two images can be seen here, with a clearer view of the reddish-pink eye ring when in full sun. (Photo: Allan Richardson)

DESCRIPTION

The single Great Frigatebird was an adult female based on plumage colours and markings (see **Figures 2-6**). It was a large bird, up to a metre in size with the distinctive Fregatidae shape with large, bent, swept-back wings and a long tail. The forked tail was visible when the bird turned sharply, but the fork was not observable when the bird was soaring.

The body plumage was primarily black with white breast and throat extending to the chin which was lighter in colour but not necessarily white (sullied or grey). The belly had a broad black border which was not obviously pointed. The head had a black hood and the back of the neck was not white but with

brownish hind collar (more obvious from photos). Narrow and brown alar bars were present on the upper wing (more obvious from photos). In a single instance when the bird was directly overhead, IB noted that when the tail was forked and the bird manoeuvred quickly, the abdomen appeared black with mottled white.

The bill had a pink lower mandible and light pink to white upper mandible. Eyes were black in colour with a reddish-pink eye-ring, ovoid in shape with a larger width at the front and narrower at the back of the eye. Feet were black.

The frigatebird made no calls while under observation on either day. It soared along the Hunter River as far north as Walsh Point and down to the Honeysuckle area of the harbour. It used few wing beats and soared or floated along the river in the strong easterly wind. It was seen several times preening its wings and underbelly while in flight. No feeding was undertaken while being watched and no interaction with other bird species was noted.



Figure 5: Side-on view showing the upper wing. The pale brown and narrow alar bars are visible in this image, as is the pink orbital eye ring. (Photo: Allan Richardson)



Figure 6: Side-on view showing how the hind collar is obviously missing on the bird. The complete lack of

'spurs' in the underwing is also obvious. (Photo: Allan Richardson)

Possible identification as a Lesser Frigatebird (*F. ariel*) or Christmas Frigatebird (*F. andrewsii*) was rejected due to the lack of an obvious white neck collar and absence of white underarms or 'spurs' auxiliary feathers emanating off the belly. The belly pattern on this individual was also not consistent with those recorded for both the Lesser and Christmas Frigatebirds (James 2004). Identification as either a Magnificent Frigatebird (*F. magnificans*) or Ascension Frigatebird (*F. aquila*) was also eliminated due to the lack of a blue eye-ring plus the lack of any of the other diagnostic features for those species.

DISCUSSION

This sighting of a Great Frigatebird is the first confirmed sighting of the species in the Hunter Region (Stuart 2016) and is also the most southerly confirmed mainland record of the species in NSW (NSW ORAC 2023). All previous NSW records for the species were located from Nambucca Heads north along the NSW coast between 1981 and 2003, along with one offshore record at Montague Island in 2010 (McAllan & James 2020; NSW ORAC 2023). Since the Newcastle sighting, there has been one further confirmed record of the species within NSW at Lord Howe Island in 2021 (NSW ORAC 2023). There is an unconfirmed record of this species in 2008 from the Hunter Estuary (Eremaea Birdlines 2023); the record has not been submitted to NSW ORAC for appraisal (A. Morris pers. comm.).

It is possible the female Great Frigatebird had been present in the area for two to three days before being sighted on 7 January 2015, with several local residents reporting seeing one, if not two frigatebirds around Newcastle Harbour. Of note, there was a possible sighting of a female Great Frigatebird at Redhead on 5 January 2015 between 0800 and 0900 h (B. Watts pers. comm.). While not confirmed, it is considered highly possible this was the same bird observed in Newcastle Harbour two days later. Another potential sighting of a female Great Frigatebird was reported from Norah Head Lighthouse on 7 January 2015, sometime between 1300 and 1500 h (D. Hogan pers. comm.). That sighting overlaps with the sighting in Newcastle, suggesting a second bird may have been in the area. Additionally, another possible female Great Frigatebird was reported at Norah Head on the evening of 8 January 2015 after the last sighting in Newcastle (R. McDonell pers. comm.). A potential sighting of a female Great Frigatebird was also reported on 14 January 2015 at Shelley Beach, Port Macquarie (Eremaea Birdlines 2023). None of those sightings were referred to the NSW ORAC for validation.

The International Ornithological Congress (IOC) recognises five sub-species of the Great Frigatebird. These are *F. minor minor* found across the northern central Indian Ocean through Indonesia to northern Australia; F. minor aldabrensis found across the tropical south-western Indian Ocean; F. minor nicolli found across the south Atlantic Ocean islands; F. minor palmerstoni found across the western and central Pacific Ocean islands; and F. minor ridgwayi found across the eastern Pacific Ocean (Gill et al. 2024). While there is still some debate about whether the taxonomy of the subspecies has been fully resolved (D. James pers. comm.), the colour combination of the bare parts (bill and orbital ring) can be used to identify the subspecies of female Great Frigatebird (James 2004). Great Frigatebird females breeding within the western and central Pacific (including the Coral Sea) are known to have a blue bill and blue orbital ring. However, the female sighted in Newcastle had a pink bill and red orbital ring. This would suggest the individual was either from the northern Indian Ocean subspecies (F. minor minor) or eastern Pacific subspecies (F. minor ridgwayi), both of which are known for the red orbital ring and pink bill (D. James pers. comm.). As the weather in the lead-up to the sighting was of strong and consistent easterly winds, it is considered more likely the bird was from the eastern Pacific subspecies. Records of eastern Pacific (or Indian Ocean) Great Frigatebird in NSW appear not to have been documented prior to this 2015 observation.

ACKNOWLEDGEMENTS

We thank John and Beth Cockerell, Lucas Grenadier, Dan Williams, Allan Richardson, Lorna Mee, John Goswell and other members of the Hunter Bird Observers Club for sharing their sightings which assisted in the acceptance of the record by the NSW ORAC. We also thank Allan Richardson for supplying photos of the frigatebird. We thank David James for his expert knowledge and comments on this sighting.

REFERENCES

- Eremaea Birdlines (2023) Birdline New South Wales: Archive January 2015. Accessed 22/11/2023, http://www.eremaea.com/BirdlineArchive.aspx?Birdline=2&From=20150101&To=20150130.
- Gill, F., Donsker, D. and Rasmussen, P. (Eds) (2024). IOC World Bird List (v14.1). https://doi.10.14344/IOC.ML.14.1.
- James, D. J. (2004). Identification of Christmas Island, Great and Lesser Frigatebirds. *BirdingASIA* 1: 22-38.
- McAllan, I.A.W. and James, D.J. (2020). Vagrant species. In 'An Atlas of Birds of New South Wales and the Australian Capital Territory. Volume 3 Eastern Spinebill to Common Greenfinch' (Eds Cooper, R.M., I.A.W. McAllan, C.C.P. Brandis and B.R. Curtis). Pp. 662–699 (NSW Bird Atlassers: Woolgoolga NSW).
- Marchant S. and Higgins, P.J. (Eds) (1990). 'Handbook of Australian, New Zealand and Antarctic Birds. Volume One Ratites to Ducks'. (Oxford University Press: Melbourne, Victoria).
- Morcombe, M. and Stewart, D. (2014). *Morcombe & Stewart Guide to Birds of Australia*. Version 1.4.1. [Mobile app]. Available from: https://apps.apple.com/au/app/morcombe-stewart-guide/id397979505
- NSW Ornithological Records Appraisal Committee (NSW ORAC) (2016). NSW ORAC Cases decided in 2015.
- NSW Ornithological Records Appraisal Committee (NSW ORAC) (2023). List of Cases: Great Frigatebird (*Fregata minor*). Accessed 9 July 2023, https://www.nsworac.org/cases.html.
- Pizzey, G., Knight, F. and Pizzey, S. (2012). 'The Field Guide to the Birds of Australia', 9th Edition. (HarperCollins Publishers: Sydney)
- Slater, P., Slater, P. and Slater, R. (2009). 'The Slater Field Guide to Australian Birds', Second Edition. (Reed New Holland: Sydney)
- Stuart, A. (Ed.) (2016). Hunter Region Annual Bird Report Number 23 (2015). (Hunter Bird Observers Club Inc.: New Lambton, NSW)
- Weimerskirch, H., Chastel, O., Barbraud, C. and Tostain, O. (2003). Flight performance: Frigatebirds ride high on thermals. *Nature* **421**: 333–334.