

Threatened species of the Northern Territory

Christmas Island frigatebird

Fregata andrewsi

Conservation status

Australia: Endangered

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Endangered

Territory Parks and Wildlife Conservation Act 1976

Description

The Christmas Island Frigatebird is a large seabird with a long hooked bill, long narrow wings and an elongated deeply forked tail. The body is mostly black, but males have a white belly patch and females have a white breast, belly and 'armpit spurs'. Adult males have a red throat pouch, which is inflated during courtship displays in the breeding season.

Christmas Island Frigatebirds can be distinguished from the similar-looking Great Frigatebird *Fregata minor* and Lesser Frigatebird *F. ariel* by their larger size, white belly patch of males, and black sides of the breast, broad white 'armpit spurs' and white lower belly of females¹.

Distribution

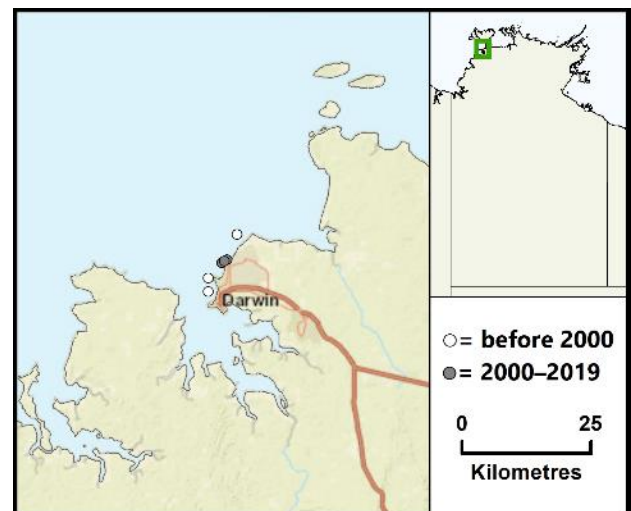
The Christmas Island Frigatebird breeds only on Christmas Island in the eastern Indian Ocean². When not breeding, birds range widely in Indo-Malaysian seas, particularly the Sunda Shelf and neighbouring Java, Natuna, southern South China and eastern Andaman Seas. The species is occasionally recorded from the Indian subcontinent, northeast Africa and northwest Australia.



Credit: K. Wilcox

In the Northern Territory (NT), the species has been recorded on the Darwin coast in 1974³, 2014⁴ and 2018, typically coinciding with regional cyclonic or severe storm events.

NT conservation reserves where reported: None.



Caption: Known localities of the Christmas Island Frigatebird in the NT (nrmmaps.nt.gov.au)

Ecology and life-history

The Christmas Island Frigatebird is a highly specialised aerial feeder and obtains food by snatching prey from the water (or occasionally land) surface, aerial pursuit of flying fish, and by chasing and harassing other seabirds (kleptoparasitism). Their main food is probably flying fish and squid, which are driven to the surface by predatory fish; though a range of other prey is consumed, including carrion, seabird chicks and grasshoppers.

On Christmas Island, it nests in tall trees, usually 10–20 above the ground, in four small colonies situated on the north and east coasts of the island. Reproductive output is very low. Clutches comprise a single egg and juveniles take 15 months to reach independence. Consequently, successful pairs breed once every two years (a biennial breeding cycle). Generation length is estimated to be 15.5 years⁵.

Threatening processes

The primary land-based threat to the Christmas Island Frigatebird is the loss of nesting trees, due to invasive weeds and dieback associated with dust emitted from phosphate mines (and habitat clearance historically). The main at-sea threat is reduced prey availability due to overfishing of predatory fish, which frigatebirds rely on to drive prey up to the sea surface. Localised threats in Indonesia include deliberate poisoning and shooting of adult birds by fishermen and mortality from entanglement with fishing lines.

Anthropogenic climate change may have a long-term negative impact on the Christmas Island Frigatebird, owing to predicted increases in 1) the frequency of severe storms, which destroy eggs or cause juvenile and adult mortality, and 2) sea-surface temperatures, which reduce oceanic marine productivity and therefore food availability.

Conservation objectives and management

Given the Christmas Island Frigatebird occurs only occasionally in the NT, no specific

conservation research or management actions are warranted for this species in the NT.

Conservation management priorities on Christmas Island include preventing further habitat loss and degradation, restoring habitat, controlling invasive species, monitoring Christmas Island Frigatebirds and their threats, and engaging with stakeholders⁶. A primary conservation action outside of Christmas Island is to reduce mortality associated with fishing activities in South East Asia.

References

- ¹ James, D.J. 2004. Identification of Christmas Island, Great and Lesser Frigatebirds. *Birding ASIA* 1, 22–38.
- ² Hill, R., Dunn, A., 2004. National recovery plan for the Christmas Island Frigatebird (*Fregata andrewsi*). Department of Environment and Heritage, Canberra.
- ³ McKean, J.L., Bartlett, M.C., Perrins, C.M., 1975. New records from the Northern Territory. *Aust. Bird Watch.* 6, 45–46.
- ⁴ McMaster, D., Rayner, T.S. McMaster, C.A., 2015. Additional records of Christmas Frigatebird *Fregata andrewsi* in the Northern Territory, Australia. *Aust. Field Ornithol.* 31, 113–117.
- ⁵ Garnett, S.T., Szabo, J.K., Dutson, G., 2011. The action plan for Australian Birds 2010. CSIRO Publishing, Canberra.
- ⁶ Threatened Species Scientific Committee, 2016. Conservation Advice *Fregata andrewsi* Christmas Island frigatebird. Department of the Environment and Energy, Canberra.