

# Breeding of Spotted Whistling-Duck *Dendrocygna guttata* on Melville Island in the Northern Territory

Magen J. Pettit

Darwin Laboratories, CSIRO Health & Biosecurity, PMB 44, Winnellie, NT 0822, Australia  
Email: magen.pettit@csiro.au

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The distribution of Spotted Whistling-Duck *Dendrocygna guttata* ranges from the Philippines through eastern Indonesia to Papua New Guinea. This species was first reported in Australia in 1995. The probable breeding of Spotted Whistling-Duck in far north Queensland was suggested in 2002 and the first breeding records confirmed in 2005. In Queensland, its distribution range has gradually expanded southwards from Cape York Peninsula to Townsville. The species has also been reported from the Northern Territory mainland and Tiwi Islands since 2011, indicating the possibility of an established population in the Top End. I compiled and reviewed all eBird records from the Tiwi Islands and present the first Australian breeding record outside Queensland.

**Keywords:** Spotted Whistling-Duck, Tiwi Islands, breeding, range expansion, eBird, *Dendrocygna guttata*

## INTRODUCTION

The Spotted Whistling-Duck *Dendrocygna guttata* ranges from the Philippines through eastern Indonesia to Papua New Guinea (eBird 2024, Gould and Barnett 2005, Johnstone and van Balen 2013, Kyne 2013, Menkhorst *et al.* 2017). It was first recorded in Australia in 1995 at Weipa, Cape York Peninsula, north Queensland (Niland 1996) and its range has been gradually expanding southwards as far as Townsville (e.g. eBird 2024, Kyne 2013, McCrie and Noske 2015, Menkhorst *et al.* 2017). The species is also present on Boigu and Saibai Islands in the Torres Strait, linking the Cape York Peninsula birds to their probable place of origin (Clarke 2004, eBird 2024, Kyne 2013). The probable breeding of Spotted Whistling-Duck in Australia was suggested by Beruldsen (2002) after observing six juveniles with an adult pair at Iron Range National Park, far north Queensland. Breeding was later confirmed by Gould and Barnett (2005), who detailed juvenile and immature birds from Awonga Point Wastewater Plant in Weipa.

Outside Queensland, Spotted Whistling-Ducks have been recorded from the Northern Territory (hereafter NT). The first NT record was an individual at Darwin's Leanyer Sewage Ponds between December 2011 and February 2012 (Kyne 2013). The second occurrence was a single bird at the same location in December 2012, and a sighting three months later at Fogg Dam Conservation Reserve, c. 70 km east of Darwin, may have been the same individual (McCrie and Noske 2015). There were no further reports from the NT mainland until October 2022, when up to six birds were seen at Leanyer Sewage Ponds over three weeks (eBird 2024). In December 2023, an individual was present, albeit sporadically, for a month at Katherine Wastewater Treatment Plant, c. 300 km southeast of Darwin (eBird 2024). These observations probably reflect a tendency by the species for dispersal and range expansion (eBird 2024, McCrie and Noske 2015) rather than vagrancy.

In July 2014, at least 20 Spotted Whistling-Ducks were discovered at Goose Creek on Melville Island, part of the Tiwi

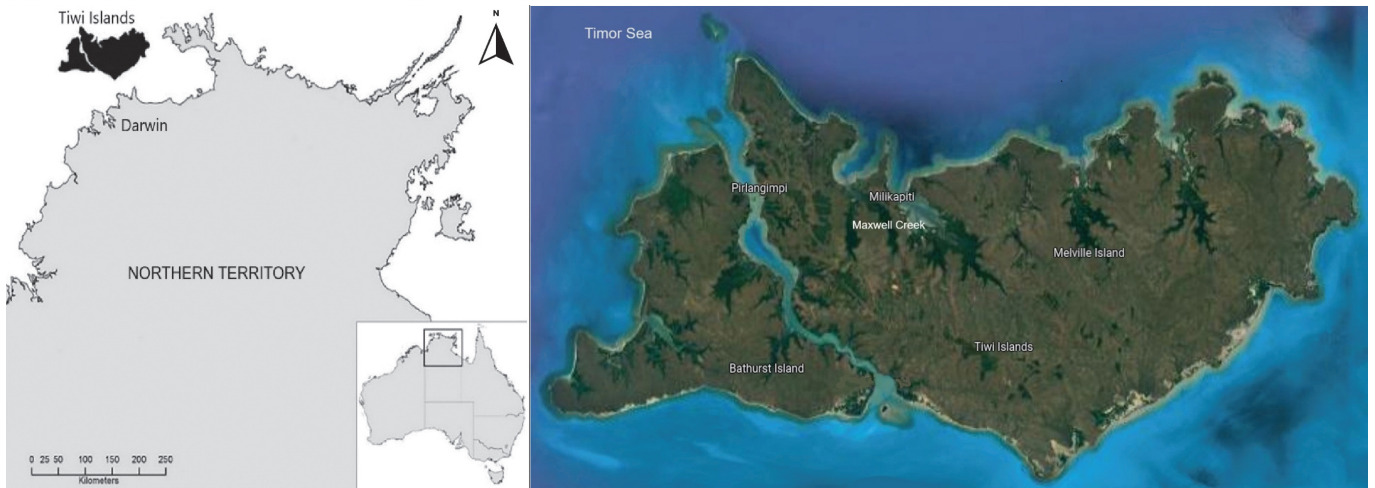
Islands, c. 80 km north of Darwin (Fig. 1) (M. Jarvis pers. comm.). It is likely that these birds originated from eastern Indonesia, with the closest population on the Tanimbar Islands, c. 400 km north of the Tiwi Islands, rather than from Weipa, c. 1,200 km directly to the east (using Google Earth 2024). Further sightings from Melville Island from 2016 to 2022 (eBird 2024) sparked speculation about the presence of a resident population. I compiled and reviewed all eBird records from the Tiwi Islands and present the first observations of Spotted Whistling-Duck ducklings in the Northern Territory and the first Australian breeding record outside Queensland.

## OBSERVATIONS

A total of 26 Spotted Whistling-Duck sightings on Melville Island were submitted from 2016 to 2024, with the highest count of 32 birds (eBird 2024). The first record of two ducklings with an adult was on 12 May 2023 at Milikapiti (11°24'57"S, 130°40'04"E), in inundated *Melaleuca* forest opposite the barge landing. The birds were observed swimming in open water but disappeared into the sedges and reeds (Fig. 2).

During nine subsequent visits to this freshwater swamp and Milikapiti's sewage ponds (c. 2 km away; 11°25'46"S, 130°40'49"E) from October 2023 to April 2024, there were five sightings of adult Ducks. The highest abundance was 18 birds but neither juveniles nor immatures were seen until 22 May 2024 (eBird 2024). On this occasion, three ducklings with two adults were swimming at the sewage ponds. Observations could only be made from a range of c. 50–100 m outside the enclosed fence (Fig. 3).

The juveniles conformed to descriptions of Spotted Whistling-Duck by the following combination of features: dark brown upperparts; white spots on the sides of the body drawn out into irregular white streaks; short yellow eyebrows and dusky eye patch (Bolen and Rylander 1983, Johnsgard 2010, Menkhorst *et al.* 2017).

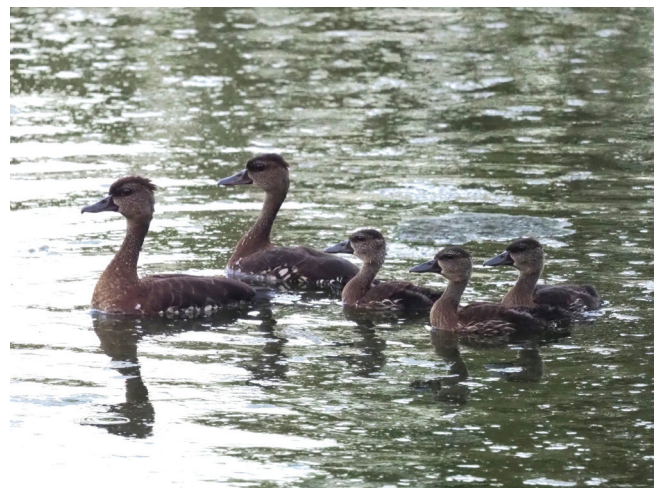


**Figure 1.** Map of Tiwi Islands, consisting of the two main islands, Bathurst Island and Melville Island, located c. 80 km north of Darwin, Northern Territory, Australia. Image from Google Earth (2024).



**Figure 2.** Spotted Whistling-Duck adult swimming with two juvenile ducklings in an inundated *Melaleuca* forest habitat in Milikapiti on Melville Island, NT on 12/05/2023.

Photo by M. Pettit



**Figure 3.** Two Spotted Whistling-Duck adults swimming with three juvenile ducklings at Milikapiti Sewage Ponds on Melville Island, NT on 22/05/2024.

Photo by M. Pettit

Wandering Whistling-Duck *Dendrocygna arcuata* and Plumed Whistling-Duck *D. eytoni* are both common in the NT but juveniles of the former can be recognised by the lack of narrow white streaks on the sides of the body, and juvenile Plumed Whistling-Duck can be differentiated by the broad yellow eyebrow and narrow dark brown stripe from the bill across the eyes and extending to the nape (Gould and Barnett 2005, Johnsgard 2010, Menkhorst *et al.* 2017).

**DISCUSSION**

Documenting the natural history of Spotted Whistling-Duck is helpful in understanding its breeding ecology as it is the least known of the genus *Dendrocygna* (Beruldsen 2003, Bolen and Rylander 1983, Gould and Barnett 2005, Johnsgard 2010). The discovery of juvenile Spotted Whistling-Duck on Melville Island is the first verified Australian record of ducklings outside Queensland, indicating this species breeds on the Tiwi Islands.

The remoteness of much of its range may at least partially explain the data deficiency. The Milikapiti sightings occurring in a freshwater swamp of *Melaleuca* forest with a mixture of sedges and reeds aligns with descriptions of similar habitats in New Guinea (Bolen and Rylander 1983, Gilliard and LeCroy 1966, Johnsgard 2010), Indonesia (Johnstone and van Balen 2013), and Cape York Peninsula (Beruldsen 2003, Gould and Barnett 2005). There is limited information on the breeding ecology of the species (Delacour 1954, Madge and Burn 1988), although are reported to nest in tree hollows associated with water (Gilliard and LeCroy 1966, Gould and Barnett 2005, Ramsay 1879). Detailed observations of fledglings are only known from aviculture, developing in c. 7 weeks (Johnstone 1960). The Milikapiti juveniles were still downy and unlikely to have flown from Indonesia or Queensland due to their size, about one third to half the size of the adult birds. No climatic influences could be identified to have contributed to the duckling’s movements southward from Indonesia or westward from Queensland (BOM 2023a,b, 2024).



It is not surprising that breeding of this species off the NT coastline has gone undetected, given that the Tiwi Islands, with Melville Island being the second largest Australian island after Tasmania (Tiwi Enterprises 2024; Tiwi Land Council 2024), is one of the NT's ornithologically under-explored regions due to the remoteness and restricted access. Birdwatchers visiting the Tiwi Islands should be aware of the potential of encountering Spotted Whistling-Duck and report observations on databases such as eBird (2024) and Atlas of Living Australia (Belbin *et al.* 2021), preferably supported by photographs.

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