Waterbird utilisation of Ross Wallbridge Reserve, Raymond Terrace, New South Wales

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INTRODUCTION

Ross Wallbridge Reserve is a small recreational reserve located on the northern fringe of the Raymond Terrace Central Business District (32°45'28"S, 151°45'00"E). It has an area of 9.5 ha and comprises two small, shallow ponds, each with internal islands. The largest island (1.6 ha) is located in the eastern pond and two smaller islands are present in the western pond. The islands and the surrounds of the ponds are covered mainly by dense stands of Swamp Oak Casuarina glauca and Broad-Paperbark *Melaleuca* quinquenervia. Historic aerial photography shows the ponds were constructed from open, marshy land in the early 1980s and since then, the planted vegetation has become thicker and more extensive, covering more than half of the reserve (https://maps. six.nsw.gov.au/).

The reserve is surrounded by busy arterial roads on three sides, and has a residential area and sporting facilities on the fourth. The confluence of the Hunter and Williams Rivers is located 500 m west of the reserve (Figure 1) and Irrawang Swamp is 2 km to the north. A concrete walking path heading northeast towards the adjacent residential area is present between the ponds. Despite a nationally significant number of the vulnerable Grey-headed Flying Fox Pteropus poliocephalus roosting at the reserve (Port Stephens Council 2025), it remains open to public access. In late August 2025 the reserve appeared poorly maintained. The area surrounding the ponds was covered by rank grass and exposed muddy areas with large amounts of litter.



Figure 1. Location map for Ross Wallbridge Reserve, Raymond Terrace, NSW. (Image Google Earth accessed 2/09/2025)

The reserve is a major roosting and breeding location for a large number of mainly common waterbirds. It has been recorded as a significant diurnal roost for Nankeen Night Heron *Nycticorax caledonicus*, with as many as 85 birds present (Herbert 2007). Other species recorded as significant by Herbert were Chestnut Teal *Anas castanea*, Australian White Ibis *Threskiornis molucca*, Straw-necked Ibis *T. spinicollis* and Latham's Snipe *Gallinago hardwickii*.

This article describes the waterbird activity at the reserve in late August 2025, and presents a summary of historical waterbird records from the site.

METHODS

Survey counts and breeding records for waterbird species were downloaded from the Birdata (https://birdata.birdlife.org.au/explore#) and eBird (https://ebird.org/region/AU) online databases. Additional records were obtained from the Annual Bird Reports (1993-2019) of the Hunter Bird Observers Club (https://www.hboc.org.au/publications/annual-birdreport/).

The data were analysed for maximum species counts and Reporting Rates were calculated. Reporting Rate (RR%) is the ratio of the number of records to the total number of surveys, expressed as a percentage.

A field survey of the reserve was conducted on 29 August 2025 to determine the current breeding and roosting activity by waterbirds.

RESULTS

The summarised data from 82 Birdata and 91 eBird entries is shown in **Table 1**, together with maximum counts, Reporting Rates and reported breeding activity. The reserve has been surveyed irregularly since 1995; however, most of the Birdata surveys dated from 2016 and most eBird surveys from 2020. The data revealed 38 endemic and migratory waterbird species were present in the reserve at various times. Ten species had recorded breeding activity.

Current activity in the reserve

A large colony of Australian White Ibis were breeding in the reserve at the end of August 2025. An estimated 1,000 birds were nesting or roosting on the island in the eastern pond. The majority of the nests were on the ground or slightly above it, as

most of the trees on the island have died. A further c. 500 birds were nesting or roosting in the lower branches of trees around both ponds. We estimated there were 450 nesting pairs on the island and a further 100 nesting pairs in the surrounding trees. A number of immature birds were present amongst the colony. Some ibis were foraging in the mud around the ponds, while others were flying in and out of the reserve, mainly to and from the north.

No eggs were seen in the nests that could be viewed. Only one chick, about 10-14 days old, was observed but others could be heard calling. Several birds that had been predated by avian predators were present on the ground below the nests. Avian predators and scavengers seen in the area were a Peregrine Falcon *Falco peregrinus* and a pair of Whistling Kites *Haliastur sphenurus*.

A colony of 40 Nankeen Night Herons was roosting in Swamp Oak on the island in the western pond and in surrounding trees. No nests were observed. Around 30 Eastern Cattle Egrets *Ardea coromanda* were roosting in trees to the south of the western pond.

A colony of several thousand Grey-headed Flying Fox were roosting in the reserve, mainly in trees not used by the ibis for nesting, but in some instances they were roosting directly above the nests.

DISCUSSION

Almost all of the species recorded are common in the Hunter Region (Williams 2020). Two uncommon species were the Magpie Goose Anseranas semipalmata (33 records) and the Glossy Ibis Plegadis falcinellus (one record). The Magpie Goose and the migratory Latham's Snipe are listed as vulnerable in NSW (Biodiversity Conservation Act 2016).

Australian White Ibis were present at Ross Walbridge Reserve year round, with a maximum count of 1600 birds in May 2024. Highest numbers were recorded August to October during the peak of the breeding season. Breeding activity extended from August to January, plus there were some nesting records from May and June. The numbers of birds using the site has been increasing steadily since 1995.

Nankeen Night Herons were also present at the site year-round, with a maximum count of 96 birds in December 2013. Highest numbers were present May to October. Breeding activity was recorded in

September, October and April. The numbers of birds on site appear to have increased since 1995.

Table 1. Waterbird species 1995-2025, maximum count, reporting rate and breeding activity, Ross Wallbridge Reserve, Raymond Terrace, NSW.

Common Name	Scientific Name	Max count	RR%	Breeding
Australian White Ibis	Threskiornis molucca	1600	93.1%	Yes
Nankeen Night Heron	Nycticorax caledonicus	96	80.9%	Yes
Dusky Moorhen	Gallinula tenebrosa	50	79.2%	Yes
Maned Duck	Chenonetta jubata	36	56.6%	Yes
Royal Spoonbill	Platalea regia	51	52.6%	
Pacific Black Duck	Anas superciliosa	37	49.1%	Yes
Purple Swamphen	Porphyrio Porphyrio	10	47.4%	Yes
Little Black Cormorant	Phalacrocorax sulcirostris	80	47.4%	
Eurasian Coot	Fulica atra	16	37.6%	
Masked Lapwing	Vanellus miles	20	37.0%	Yes
Chestnut Teal	Anas castanea	19	32.9%	Yes
Australasian Grebe	Tachybaptus novaehollandiae	5	31.2%	Yes
Great Egret	Ardea alba	7	28.3%	
Grey Teal	Anas gracilis	32	26.6%	
Straw-necked Ibis	Threskiornis spinicollis	1636	24.9%	
Little Pied Cormorant	Microcarbo melanoleucos	7	19.7%	
Magpie Goose	Anseranas semipalmata	93	19.1%	
Eastern Cattle Egret	Ardea coromanda	200+	19.1%	
Australian Pelican	Pelecanus conspicillatus	10	15.0%	
Black Swan	Cygnus atratus	4	12.1%	Yes
Hardhead	Aythya australis	20+	11.0%	
White-faced Heron	Egretta novaehollandiae	6	9.8%	
Australasian Darter	Anhinga novaehollandiae	3	7.5%	
Plumed Egret	Ardea plumifera	4	5.8%	
Mallard	Anas platyrhynchos	10	4.6%	
Little Egret	Egretta garzetta	2	2.9%	
Latham's Snipe	Gallinago hardwickii	2	2.3%	
Great Cormorant	Phalacrocorax carbo	2	1.7%	
Silver Gull	Chroicocephalus novaehollandiae	2	1.7%	
White-necked Heron	Ardea pacifica	1	1.7%	
Australasian Shoveler	Anas rhynchotis	1	1.2%	
Australian Pied Cormorant	Phalacrocorax varius	1	1.2%	
Pied Stilt	Himantopus leucocephalus	1	1.2%	
Black-fronted Dotterel	Elseyornis melanops	1	0.6%	
Buff-banded Rail	Hypotaenidia philippensis	1	0.6%	
Glossy Ibis	Plegadis falcinellus	1	0.6%	
Greater Crested Tern	Thalasseus bergii	1	0.6%	
Plumed Whistling Duck	Dendrocygna eytoni	2	0.6%	

Magpie Geese were first recorded at the reserve in May 2019, when a flock relocated from the Hunter Wetlands Centre at Sandgate (Stewart 2020). The birds subsequently returned to the Wetlands Centre in May 2020. The maximum number recorded at Wallbridge Reserve during this period was 55 birds. Small numbers continued to be irregularly recorded

until December 2023 when a large flock arrived. Birds were regularly recorded on site until March 2024, with the maximum number recorded being 86 birds. A large flock was again present on site from September to December 2024 with a highest count of 56 birds. Highest counts were recorded from

October to March. There was no observed breeding activity by the species at the site.

Straw-necked Ibis roosted at the site year-round with a maximum count of 1636 birds in July 2025. Highest numbers were present in May and June. Eastern Cattle Egret also roosted at the site year-round with a maximum count of 200+ birds in June 2007. Highest counts were present from February to July. Neither species has used the site for breeding.

CONCLUSION

Ross Wallbridge Reserve supports a rich diversity of waterbirds, some of which are present at times in large numbers. Despite the presence of the adjacent commercial business district and the busy surrounding arterial roads, the small reserve provides a relatively safe and secure breeding site for large numbers of Australian White Ibis and lesser numbers of Nankeen Night Heron. The reserve also provides a safe year-round roosting site for a diverse range of other waterbird species

including Eastern Cattle Egret, Straw-necked Ibis and Magpie Goose. The availability of extensive nearby areas of wetlands and river floodplains for foraging is undoubtedly a major factor influencing the birds' utilisation of the reserve.

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