

Cattle Egret breeding at Gloucester, NSW sustained at increased level in 2011/12

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Breeding at the new Cattle Egret *Ardea ibis* colony at Gloucester, NSW has been sustained for a second year with an earlier commencement date and an increased number of nests. At least 217 nests were built and a minimum of 340 chicks were counted during the 2011/12 season.

INTRODUCTION

The first recorded successful breeding of Cattle Egret *Ardea ibis* in the Gloucester Valley 2010-2011 occurred in willow trees overhanging a dam opposite the Gloucester Golf Club on Bucketts Way (32°01'52"S 151°57'10"E (Drake-Brockman 2011). The following season I was pleased to find breeding birds present in November 2011.

DETAILED OBSERVATIONS

On 4 November 2011, 150 Cattle Egrets were present at the same site as the previous year, in full breeding plumage, perched or sitting on nests in the willow trees on the western side of the dam. On 8 November the count had increased with between 280 and 300 egrets present near dusk and preparing to roost for the night. Although at least 60 birds were in white plumage or showing only a suggestion of orange head/neck feathers, all the birds present were considered capable of breeding (Maddock 1989). There was an occasional display of back plumes and constant movement between perches. The dam water level was high due to heavy rain during the previous three months. An industrial site adjoining the dam had been cleared and levelled with rough barriers placed to stop run-off into the dam. This did not appear to have deterred the egrets from returning to the breeding colony.

A quick check on the colony on 14 November found over 50 nests occupied with birds incubating. I was away for four weeks and the next inspection on 20 December found over 100 adults present at nests with a few small chicks showing heads. By 3 January 2012, 63 chicks were standing away from nests, and over 150 nests were counted with many containing small chicks or with adults

sitting tight. Five nests had been built in a tree previously unused for breeding on the south-east side of the dam.

On 24 January, many more egrets were present with at least 217 nests - the egrets having now built nests in every tree edging the dam. There was constant motion with egrets arriving to feed chicks and departing to search for food. Water level in the dam remained high with local flooding. The count totalled 98 adults perched, 106 adults incubating and 152 chicks perched on or near nests.

By the next visit on 7 February, many nests were empty or falling apart but 102 adults were still incubating with over 150 chicks perched. I observed one pair mating. On 13 February, conditions were similar with many chicks exercising their wings and flying to different positions within the nest trees; 188 chicks were counted with 93 adults incubating. By 7 March there were 265 chicks perched with 62 adults incubating, and on 9 March there were 334 chicks perched with only 19 adults incubating. Many chicks were flying between the nest trees and into the high grass at the edge of the dam, keeping out of sight, or to tall gums nearby. It was suspected that some young had fledged and were foraging with adults.

Numbers at the colony were now declining and on 21 March only ten adults were incubating or sitting on nestlings, with 305 chicks present. By the beginning of April only 184 chicks remained, either in or near the nest trees. Some flew to the ground where about 19 were standing beside the channel that runs into the dam. A few small chicks remained in nests with adults flying in to feed them. About six adults remained perched without feeding. A dead chick was floating in the dam with two dead chicks hanging by the neck in the willow

trees. Work had been carried out on the industrial site but again this did not seem to have disturbed the egrets.

On 11 April, 89 chicks were perched with a few adults while other adults were flying in to feed chicks. As I approached the dam, chicks flew away, leaving 28 that would most likely have flown if I had gone closer. Only three chicks appeared too immature to fly.

On 24 April 25 chicks remained. An adult flew in to feed two begging chicks, at first perching for a minute before feeding both and then departing. A second adult flew in and perched without feeding, and then a third adult arrived and immediately fed one chick four times before flying off. My last visit on 27 April found the site deserted. A drive around the Avon and Gloucester valleys found 464 adults and juveniles. This total is likely to be well below the actual number as many suitable paddocks are out of sight from public roads and I did not check the Barrington valley. After that date no egrets have used the breeding site.

DISCUSSION

Although it was not possible to say precisely when egrets first occupied the site in 2010, occupation in 2011 appeared to start approximately two months earlier, with a few adults sitting on nests by 4 November and chicks present by 20 December. Numbers built up quickly with nests constructed in every willow tree edging the dam (the previous season involved nests in trees only on the south-western and western edges), and desertion of the site before the last week of April 2012, approximately one week earlier than the previous season. It was noted that late breeders included several without the usual orange head breeding plumage, perhaps indicating they were first year breeders. Conditions at the colony became so crowded that by early March adults were roosting overnight on a small dam about 500m from the colony (observed at dawn on 8 March).

Although the highest count of chicks this season was 334 against about 310 the previous season, numbers are inaccurate due to the constant movement of adults and chicks between trees, the increased area of nests built, and the staggered dates of nest construction and hatching, with chicks departing the site by mid-March to forage with adults. It is assumed the first clutches were laid at the end of October 2011, and an adult pair was observed mating on 7 February 2012.

Observation of chicks being fed at the site on 24 April 2012, supposes clutches were being laid during February.

Since the breeding site was deserted at the end of April 2012, counts around the river flats have revealed flocks of 70 to 250 which were still present in the Barrington, Gloucester and Avon valleys in May 2012, with small groups (5-10) seen at Wards River south of Gloucester, and Bundook (east of Gloucester), areas where Cattle Egret have not been previously recorded by me.

No interactions with other waterbirds were noted, although occasionally Little Black Cormorants *Phalacrocorax sulcirostris* and Little Pied Cormorants *Microcarbo melanoleucos* were roosting in the nest trees, and during January and February 2012 a juvenile Australasian Darter *Anhinga novaehollandiae* was present.

CONCLUSIONS

Breeding at the new Cattle Egret colony at Gloucester has been sustained during a second year with an earlier commencement date and an increased number of nests. All potential nest sites were occupied and there is little scope for further expansion of the colony.

REFERENCES

- Drake-Brockman, P. (2011). A new Cattle Egret breeding colony at Gloucester, NSW. *The Whistler* 5: 8-9.
- Maddock, M. (1989). Colour and First Age of Breeding in Cattle Egrets as determined from wing-tagged birds. *Corella* 13: 1-8.