

The combination of established, relatively constant flight paths and dispersal of seed by Pied Currawongs results in a continual rain of seed, in the form of regurgitated pellets, during the winter over ASF and nearby areas. As the distribution and abundance of 'escaped' ornamental and hedge plants increase, the winter food resources also increase, and in turn may support an increased Pied Currawong population (Mulvaney 1986). *Pyracantha* spp. are the major winter food for Pied Currawongs in Armidale and as such their seeds are widely dispersed in and around Armidale. *C. monogyna* shrubs often keep their fruit until summer and do not provide a major portion of Pied Currawong winter diet in Armidale, but may be an important food reserve for harsh winters and sudden cold periods in spring. Fruits of other woody species are ingested to a lesser extent but may become more significant in the future.

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COLONIAL NESTING OF STRIATED HERONS AT TUGGERAH, NEW SOUTH WALES

Standard reference texts state that the Striated Heron *Butorides striatus* (a) normally nests solitarily but occasionally colonially (Hancock and Kushlan 1984); (b) nests solitarily in mangroves but gives one record of colonial nesting at Port Essington, Northern Territory (Blakers *et al.* 1984); (c) nests (solitarily) in mangroves or similar leafy cover 3-9 m above water (Pizzey 1980); (d) nest (solitarily) in fork in mangrove or other swamp trees up to 10 m (Macdonald 1973); and (e) nest solitarily in mangroves (Slater *et al.* 1986). Therefore an apparent successful colonial nesting attempt at Chittaway Point, Tuggerah Lakes, on the New South Wales Central Coast, warrants further details.

The Chittaway Point (33°20'S., 151°05'E.) nesting site was located in Swamp-oak *Allocasuarina glauca* swamp forest, which has an understorey of the Common Reed *Phragmites australis*. Except for the dry period during October 1988 very shallow water has been present in the swamp most of the time the colony has been under observation. The wetland is located on the northern bank of Ourimbah Creek, forming part of the delta of the creek where it enters Tuggerah Lakes. The three nests in the colony were located among nine Little Egret *Egretta gazetta* nests, the latter breeding colony having been located here since 1982 (Lindsey 1985). All Striated Heron and Little Egret nests were located in Swamp-oaks, even though one Grey Mangrove *Avicennia marina* and several Norfolk Island White Oak *Lagunaria patersonia* were in close vicinity.

The three Striated Heron nests were found over a three month period, but this was because colonial nesting was not expected so no special effort was made to search for nests. Details of each nest are as follows:

Nest A: Located 1 November 1988 3.4 m above ground, against and under a bend in the main trunk. Nest platform consisted entirely of Swamp-oak twigs and measured 33 x 18 cm, depth of cup 4 cm, total depth of platform 19 cm.

One large young located 3 m away on 1 November 1988 and up to 30 m away a few days later. These may, of course, have been different birds.

Nest B: Located 19 December 1988 2.1 m above ground, against side of tree on horizontal branch. Nest platform was dish-shaped, 31 cm diameter, nest cup 2.3 cm deep and total depth of platform 8.5 cm. Nest consisted entirely of Swamp-oak twigs.

One downy young and two eggs on 19 December 1988; three young banded 26 December 1988; young up to 3 m away from nest 5 January 1989, and on 17 January 1989 young could not be located, although adults were still giving distraction displays.

Nest C: Located 17 January 1989 6.8 m above ground on horizontal limb, 2 m out from main trunk on a horizontal branch and made from Swamp-oak twigs. This nest was not as substantial as the other two and was so precarious that it could not be measured.

Nest contained two young, estimated eight days old on 17 January 1989, and twelve days old on 20 January 1989 when they were banded. Both young climbed up to 2 m away from nest when capture was attempted. Only two empty eggshells were located below the nest, confirming clutch size as C/2. Young were last located near the nest on 25 January 1989 but adults were still giving distraction displays on 25 February 1989.

The three nests were located in a triangle with sides AB 67 m, BC 61 m and CA 87 m. While the nest cups contained Swamp-oak needles (=leaves), it was felt that these had not been specifically used for lining, rather that they had fallen there in the course of events.

Hancock and Kushlan (1984) record that some nesting groups (country not stated) have been recorded with nests up to 8 m apart and nest heights from 0.5 m–10 m above ground, and sometimes in association with other species. This small colony at Chittaway Point conforms to that pattern except the nests were much further apart.

I consider that the nesting was a colonial activity and not a co-incidental gathering for the following reasons:

There are many kilometres of similar nesting habitat round the shores of Tuggerah Lakes in Chittaway and Tuggerah Bay, yet all nests were in this small locality;

Nest C was at the eastern end of the egret rookery being 8 m from the closest Little Egret nest, while nest B was at the western end of the egret colony, being about 20 m from an egret's nest. The egrets were displaying in the colony before the end of September and no doubt contributed to attracting the Striated Herons to the site.

No interaction between birds was observed but, as the nests were not found during the initial visits to the egret colony, there was no opportunity to investigate this matter.

From data provided by Hancock and Kushlan (1984) for the incubation period (21–25 days), and based on our experience of the agility of birds of known age, extrapolated data suggest that the three clutches were completed approximately 20 September 1988, 28 November 1988 and 18 December 1988, respectively.

The only food item identified was found below nest C on 20 January 1989: a freshly expired whole young Sea Mullet *Mugil cephalus*, 9 cm in length. These small school mullet are common in water around the delta.

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