

Notes on the Breeding of the Cattle Egret in North-eastern New South Wales

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Interesting observations were recorded in relation to the nesting of a small number of Cattle Egrets (*Bubulcus ibis*) in a breeding colony of White Egrets (*Egretta alba*), Little Pied Cormorants (*Microcarbo melanoleucos*), and Little Black Cormorants (*Phalacrocorax sulcirostris*).

I believe that they are the first Cattle Egrets to be recorded as breeding in Australia, though judging from the numbers of birds now present in northern Australia (eighteen birds were liberated in the Kimberley Division of Western Australia in 1933) breeding must have taken place shortly after the introduction of the species from Calcutta more than twenty years ago (*Emu*, vol. 49, 1950, p. 191).

The week-end of November 13 and 14, 1954, was spent in watching the nesting colony which was on the Ulmarra Swamps some eight miles east of Grafton on the Clarence River, north-eastern New South Wales. The nesting-site was an oval-shaped lagoon some 400 yards by 100 yards, in the centre of which was a large thicket of tea-tree (*Melaleuca* sp.) standing in three feet of hyacinth-choked water. The trees were about forty feet in height. The clump of trees was occupied by a breeding population of about 300 pairs of White Egrets, and numbers of both Little Pied and Little Black Cormorants. Amidst this colony were six breeding pairs of the Cattle Egret.

Upon arrival at the lagoon I circled the colony in order to ascertain the number and the species of birds. My attention was claimed by two orange-necked egrets perched, quietly and with a rather dejected attitude, on the tops of the tea-trees towards one end of the colony. It did not occur to me at the time that these birds might be breeding. I waded into the thicket and most of the birds rose into the air but soon settled again when I remained still. After an extended period of observation of the birds at their nests from below, I was surprised to see a Cattle Egret sitting on a nest some 20 yards from where I was standing. When I moved forward the bird slowly raised itself from brooding and flew to the edge of the trees, where it perched on one of the topmost branches.

The nest was built on a short, rather slender, branch about 19 feet from the water and it held three well-incubated eggs. In the same sapling were three nests of the White Egret, each containing eggs. I climbed several other trees and noticed that where one or a pair of Cattle Egrets perched on the top of a tree their nest would be situated somewhere in the branches below. A second nest was located; it con-

tained four eggs on the point of hatching. In fact, each of two eggs was chipped by the egg-tooth of the young within it. When I descended from this nest and retired a little distance away the bird returned readily to the eggs.

Four additional nests were found, containing five, three, six, and five eggs respectively. No two Cattle Egrets nests were in the same tree though all were associated with nests of the White Egret. The height of the nests above the water varied from 19 to 35 feet. A thorough investigation of the entire colony showed that only six pairs were breeding and that there were no other Cattle Egrets present.

The Cattle Egrets were approximately half the size of the White Egrets. Their plumage was white except for the head, neck and upper-breast, which parts were a distinct orange-rufous colour. A strip of similar hue adorned the lower back and rump, between the wings. The bill was a bright yellow and the legs and feet appeared to be brownish. I was unable to detect any nuptial plumes though such could have been present. The birds, although of a quiet disposition, were wary, certainly more so than the White Egrets.

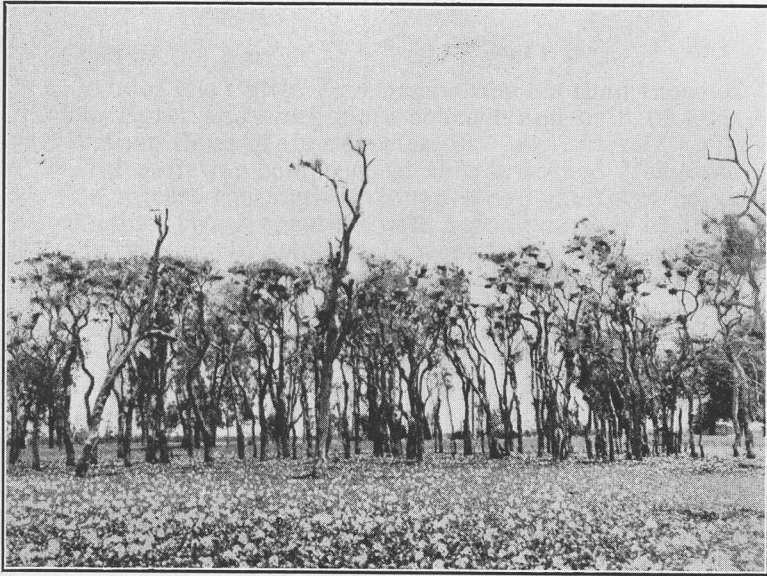
Although their numbers were few the Cattle Egrets apparently received breeding stimulus from their association with the large number of nesting White Egrets. Doubtless there will be an increase in the number of Cattle Egrets nesting in this colony next breeding season.

The White Egrets had eggs in all stages of incubation, some clutches being incomplete and freshly laid. Young birds about a week old were also examined. These nestlings were covered in a drab, whitish down and their soft parts were yellowish-green. Egg-clutches varied from three to five, four being the normal set. Five eggs in a clutch were discovered in two instances only.

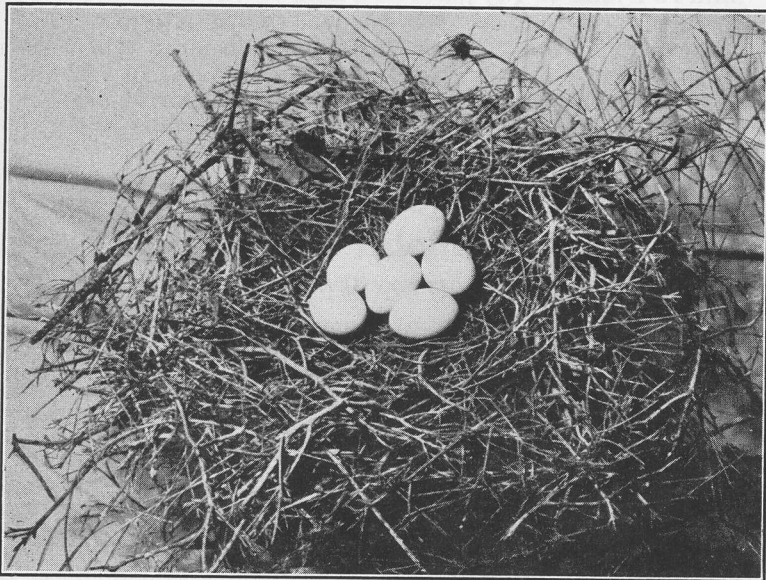
The adult White Egrets showed the usual dorsal nuptial plumes. Their bills were of a yellowish-horn colour and their feet and legs were blackish-brown with yellowish colouring in the region of the ankle or 'knee'. In some birds these parts were a reddish colour.

The Little Pied Cormorant was more numerous than the Little Black Cormorant. Both species had eggs in every phase of incubation, and also young more than a week old. The young Cormorants were responsible for the incessant chatter that issued from the colony. A lone Plumed Egret (*Egretta intermedia*), lacking nuptial plumes, was observed for a period as it perched amongst its relatives. It proved to be merely a straggler.

A friend, residing near Ulmarra, reported that earlier in the year he had seen a 'small white crane' feeding beside cows in a paddock close to his house. No further details were furnished but there is little doubt that the bird was a Cattle Egret.



Nesting site of Cattle Egrets, Ulmarra swamps, Clarence River, N.S.W.



Nest and eggs of the Cattle Egret, Ulmarra swamps, Clarence River,
N.S.W.

Photos. by M. T. Goddard

Description of the Nest of the Cattle Egret

The nests of the Cattle Egret were smaller than those of the White Egret and were more concave and built of finer materials than those of that species.

A typical nest was composed of thin branched *Melaleuca* twigs and sticks, the slightly concave egg platform being lined with finer twigs, together with a small number of dried *Casuarina* needles. In some nests were twigs of the swamp box (*Tristania suaveolens*) and of gum trees (*Eucalyptus* sp.). Average dimensions were—diameter 13 inches, thickness 5 inches. Nests were firmly supported in all instances, either by a flat fork and its associated twigs, or by short upright leafy branches. In all cases the main supporting branch was short and slender.

Description of the Eggs of the Cattle Egret

Clutch from three to six, varying from oval to rounded oval and of the true heron type. Colour, white with a delicate bluish tinge, the surface being smooth and slightly lustrous but when examined with a lens shown to be minutely indented with shallow pittings. On some eggs irregular patches of lime occur. A clutch of six eggs measures (A) 48 mm. x 33 mm., (B) 50 mm. x 34 mm., (C) 49 mm. x 34 mm., (D) 48 mm. x 35 mm., (E) 47 mm. x 33 mm., (F) 49 mm. x 34 mm.

The foregoing occurrence of the Cattle Egret in New South Wales is of particular interest in view of the recent occurrence of the species in mainland North America, possibly from birds first introduced into South America some twenty-odd years ago. An interesting article on the species in the Americas was published in the *National Geographic Magazine* for August 1954.

The Portland Adelie Penguin

By NOEL F. LEARMONTH, Portland, Vic.

The Adelie Penguin (*Pygoscelis adeliae*) found in Portland Bay early in July 1933 and recorded in *The Emu*, vol. 55, p. 100, has raised some interest. Mr. Keith Hindwood writes—

Serventy (*Emu*, vol. 47, p. 256) mentions the occurrence of the Adelie Penguin near Perth, March 1937. This occurrence was recorded in *Emu*, vol. 37, p. 65, by H. M. Whittell, who assumed (or rather the Superintendent of the Perth Zoo did) that it had been brought to Fremantle by a ship of the Japanese whaling fleet which had lately passed through on its way north. Possibly two separate birds are included in the above record(s). Whittell mentions Cottesloe Beach and the date the bird was seen by him in the Zoo as April 18, whereas Serventy's bird came from near the City Beach in March 1937. . . . If it could be ascertained whether any ships from down south were in Australian waters during July 1933 one would have a possible clue to the Portland occurrence, which is a remarkable one if the bird was unassisted. Serventy rejected the W.A. records from the Australian list on the score of probable assisted passage.