

Medium to large elegant wading birds with long neck and legs, straight dagger-like bill and long unwebbed toes. Flight strong, typically with heavy languid wingbeats on broad wings, neck folded back and head tucked in, and legs trailing. Sexes alike. Immatures of most species are like adults but duller. Many species have ornamental plumes, which may be on the head, back and chest, sometimes distinctively coloured. The colours of bill, facial skin, legs and feet may become brighter or change as birds come into breeding condition. They feed in shallow water or on damp pasture, walking slowly or standing motionless and lunging at prey. Diet is mainly aquatic animals. All may make a harsh grating call in flight; otherwise silent except at breeding colonies. Many species breed and roost communally, others are solitary. Lay 2–5 blue-green eggs on a platform of sticks built in trees or on cliffs.

CATTLE EGRET *Bubulcus ibis*

Locally common Australian migrant

50 cm, 360 g. *Small stocky and short-necked* (shorter than body) heron with *yellow bill*, grey legs and feet, and a *heavy jowl* of feathers under the bill. In breeding plumage, orange-buff plumes on head, neck and breast. Transitional stages from all white to buff common from September onwards. Non-breeding and immature birds all white but can have a faint buff wash on the crown. **Habitat:** *Usually associate with farm animals, especially cattle*, in damp pasture. May return to the same farms or group of farms for autumn and winter year after year. [Sp 112]



HERONS, EGRETS and BITTERNs Ardeidae

About 65 species; 10 in the New Zealand region, including 5 breeding species. An endemic species, the New Zealand Little Bittern *Ixobrychus novaezelandiae*, became extinct in the late 1800s.

This family occurs worldwide, mainly in the tropics. Their broad-winged flight is ponderous but strong, though the smaller species are faster. Apart from the bitterns and night herons, they are active by day. They have a slender body and long neck and legs; night herons have a stouter body and a shorter neck. All have a straight, dagger-like bill and a short tail. The bill, on a long, often kinked neck, is ideal for seizing or skewering fish.

Patches of powder down are on the breast and rump in bitterns, and the thighs also in egrets. The middle of the three forward-pointing toes has serrations along the side like the teeth of a comb and is thought to remove fish-slime and mud during grooming and preening. All species give a low-pitched croak when alarmed but feed silently.

Egrets and herons are very similar: for example, all have bare facial skin, often distinctively coloured. Egrets are white; herons are usually grey: the distinction is useful but not absolute. Egrets are gregarious and breed in colonies, often mixed with other egrets and with ibises; true herons are solitary. Both typically have plumes when breeding. Their nests are untidy platforms of sticks and twigs. Incubation starts with the first or second egg, and so chicks are of different ages and sizes. Adults feed the young with regurgitated food, not offering whole food. The young start breeding at one or two years old, sometimes still in immature plumage.

Herons, egrets and bitterns feed mainly on fish; also frogs and insects. Larger species may take small mammals and birds as chance offers.

Reading: Hancock, J. & Elliott, H. 1978. *The Herons of the World*. London: London Editions. Hancock, J. & Kushlan, J. 1984. *The Herons Handbook*. London: Croom Helm.

112. CATTLE EGRET *Bubulcus ibis*

Plate 25

Size: 50 cm; males 390 g, females 340 g

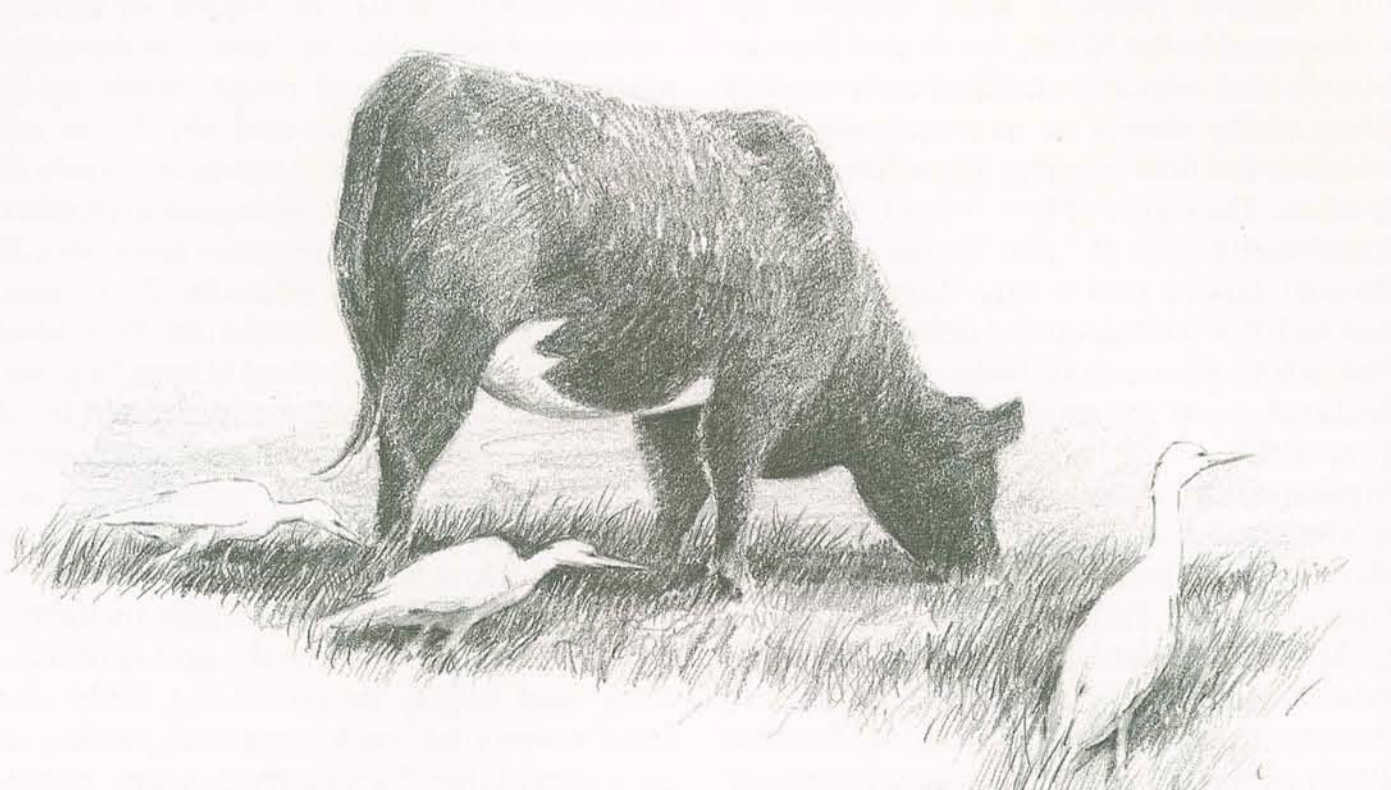
Geographical variation: Two subspecies: *ibis* of Africa spread in the twentieth century to South and then North America. The larger *coromandus* of southern and eastern Asia, including Japan and southern Korea and China, spread south to Indonesia, Australia and New Zealand.

Distribution: Breed widely in the Americas, Africa, Asia and Australasia. In Australia, they are common and widespread but breed especially in Queensland and New South Wales. First records in New Zealand were in 1963, possibly 1956, and from then they have been recorded annually as steadily increasing winter visitors until they reached a peak in 1986 of well over 3000 birds. They arrive mainly in April–May, making a landfall somewhere on western coasts, stay for a while to feed, and then move to a few favoured farms or open habitats in the North, South, Stewart and Chatham Islands. Vagrants have been recorded from the Kermadecs, The

Snares, Auckland and Campbell Islands. Most return to Australia in October–November, but some, mostly juveniles, remain throughout the summer. They have not bred in New Zealand.

The largest wintering flocks are at Rangiriri (Waikato), and Whirokino (Manawatu). Main wintering sites in the North Island are Unahi (Far North), Ruawai (Northland), Parakai (Auckland), Aka Aka and Piako (South Auckland), Rangiriri and Lake Ngaroto (Waikato), Awaiti (Bay of Plenty), Lake Hatuma (Hawke's Bay), Featherston (Wairarapa), Whirokino and Lake Horowhenua (Manawatu). In the South Island: Takaka (Nelson), Grovetown (Marlborough), Karamea, Westport and Kokatahi (West Coast), Ellesmere (Canterbury), West Taieri and Stirling (Otago), and Wyndham and Thornbury (Southland).

Population: National counts in late August rose from 293 in 1977 to a peak in 1986 of 3000+, fell to 2000+ in 1987, and to 1000+ in



1988. By the mid-1990s, numbers had dropped to fewer than 1000 birds each year.

Behaviour: Cattle Egrets are gregarious. In Australia, they nest colonially in trees in or beside swamps and lakes or on islands in settled or industrial areas, often with other egret species and with ibises. In New Zealand, they feed in small parties or in flocks of up to several hundred birds, and they roost in tall trees, mostly macrocarpa, or on or near the ground in swamp or lakeside vegetation. They are shy and wary, and seldom allow close approach.

Feeding: In New Zealand, they associate with cattle and with other domestic stock, especially sheep. They walk slowly forward, neck outstretched, peering at the ground, with backward and forward movement of the head. Mostly they search independently, but sometimes they seem co-ordinated: those at

the back of a flock fly to the front and the flock rolls forward along a drain or across a paddock. Their diet is mainly earthworms, grass grubs, larvae of moths and flies, and in the north, crickets. Young birds that overwinter also feed on flies, grasshoppers and a few mice. They may sway their necks from side to side before lunging at flies on grass. Occasionally they perch on resting cattle or sheep, but do not seem to use them as vantage points to scan for prey or to feed on ticks and other parasites of large animals, as they do in tropical countries.

Reading: Bridgman, H.A. & Maddock, M. 1994. *Notornis* 41: 189–204. Jackson, W.R. & Olsen, M. 1988. *Notornis* 35: 83–85. Heather, B.D. 1991. *Notornis* 38: 165–169. Maddock, M. 1993. *Corella* 17: 93–99. McKilligan, N.G. 1985. *Ibis* 127: 530–536.