

Bitterns are specialised for living in swamps; typically short-necked and camouflaged brown with dark and pale streaks, especially on underparts. Sexes alike. When disturbed, they 'freeze', with body and bill pointing skywards, sometimes swaying with raupo or reeds moving in the breeze.

AUSTRALASIAN BITTERN (Matuku) *Botaurus poiciloptilus*

Rare native

71 cm; ♂ 1400 g, ♀ 1000 g. Large bulky thick-necked bittern, mottled brown and buff. Secretive, partially nocturnal, generally keeping within dense cover where its plumage blends with the vegetation. When flushed, rises with broad rounded wings labouring. Flight direct, neck withdrawn, legs trailing and with slow steady wing-beats. Usually solitary. During breeding, distinctive deep booming calls, like air being blown over an open bottle. **Habitat:** Mainly freshwater wetlands, especially with dense cover of raupo or reeds. Some movement to coastal wetlands in autumn and winter. **Breeding:** Sep–Feb.

[Sp 114]



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 novaehollandiae*, 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.

Hérons, 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.

114. AUSTRALASIAN BITTERN *Botaurus poiciloptilus* Plate 26

Other name: Matuku

Size: 71 cm; males 1400 g, females 1000 g

Distribution: Breed in southern Australia (including Tasmania), New Zealand, New Caledonia and the Loyalty Islands. In New Zealand, they are widely distributed in the North, South and Stewart Islands, but are found mostly in Northland, Waikato, Bay of Plenty, Manawatu, southern Wairarapa and on the West Coast. Resident on Great Barrier and possibly Mayor Islands. They are in tall, dense beds of raupo and reeds in freshwater wetlands, wet habitats with a mixture of water purslane and willow weed, and damp pasture infested with large clumps of rush or introduced tall fescue.

Population: Estimate in 1980: 580–725 birds.

Conservation: Protected rare native. Bitterns

have declined through drainage and 'reclamation' of wetlands, and cattle grazing in swamps which damages breeding cover. They are possibly more common than estimated because they are cryptic and can live in small swamps not included in national estimates.

Breeding: Nest in dense stands of raupo and reeds surrounding lakes and in swamps. Nests are built by the female, who breaks down all reeds within reach until a platform is made 250–300 mm above water level. Laying is in September–November. The female alone incubates the clutch of 3–4–5 olive-brown eggs (51 x 37 mm) for c. 25 days, and then feeds the young. The chicks fledge at c. 7 weeks old.

Behaviour: Usually solitary and stealthy. If

disturbed, they may stand tall, neck fully stretched up, head and bill pointing skywards, or drop slowly down into the vegetation by retracting their head and crouching down, their plumage looking very reed-like. This cryptic 'freeze' posture is a surveillance posture; their eyes can look all around from this pose. On windy days they may also sway to match the movement of the vegetation.

When startled and put to flight, Australasian Bitterns may make their version of the usual heron croak. Calling from within the reedbeds, males advertise their territories by booming – making sounds rather like a muffled foghorn or that produced

by blowing across an open bottle.

Feeding: Diet is fish (especially eels), frogs, freshwater crayfish and aquatic insects, caught mostly on or near edges of ponds or waterways. They feed alone, sometimes from traditional feeding platforms made by flattening clumps of reeds. Holding their head and neck parallel to the surface, they sway the head from side to side or keep still for up to 10 minutes; they then lunge and swallow the prey whole or, if too big, by shaking and battering it first. They feed mostly at night, and so are seen mainly at dawn and dusk.

Reading: Whiteside, A.J. 1989. *Notornis* 36: 89–95.