

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.

REEF HERON *Egretta sacra*

Rare Pacific vagrant

66 cm, 400 g. White phase is stocky with short legs and long heavy brownish-yellow bill. Legs yellowish green to grey. In breeding season, strap-like plumes form on nape, chest and back. Feeding stance typically hunched and horizontal. **Habitat:** Coasts. All NZ resident birds are dark (see Plate 26), but a vagrant or colour variation has been seen once in NZ: Canterbury, June 1987. [Sp 111]



REEF HERON (Matuku moana) *Egretta sacra*

Uncommon native

66 cm, 400 g. Dark phase uniformly slaty-grey heron with a long heavy horn-coloured-to-yellowish bill; legs relatively short, yellow-green. Early in breeding season, long strap-like plumes form on back and short ones form on nape and foreneck. Juvenile browner and lacks plumes. Feeding stance hunched and almost horizontal; flight slow just above the water surface. Usually solitary or in pairs. **Habitat:** Mangrove inlets, rocky shores, wave platforms and sometimes on intertidal mudflats. Commonest in Northland, decreasing southward and uncommon in South, Stewart and Chatham Is. **Breeding:** Sep-Mar. [Sp 111]



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.

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.

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.

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

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.

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.

111. REEF HERON *Egretta sacra* Plates 25 and 26

Other names: Matuku moana, Eastern Reef Egret

a white phase (common in the Pacific islands but recorded only once in New Zealand). Occasionally there is also a third, mottled phase, which is intermediate.

Size: 66 cm, 400 g

Distribution: Eastern Asia, from Bangladesh to southern Korea and Japan, to Australia and New Zealand, and eastward through the tropical Pacific to the Marquesas, Tuamotu

Geographical variation: Two subspecies, *albolineata* of New Caledonia and the Loyalty Islands, and *sacra* elsewhere. Reef Herons are usually dimorphic, with a dark phase (the only one seen breeding in New Zealand) and Austral Islands. Reef Herons are widespread in the North, South and Stewart Islands and adjacent small islands, mainly along rocky shores or in mangrove-filled estuaries and tidal streams, not on long, sandy beaches. They are seldom inland, although occasionally seen at Lake Taupo. Scarce on Stewart Island and a rare vagrant to the Kermadec, Chatham and Auckland Islands. The white phase has been seen in New Zealand once: Avon-Heathcote Estuary (June 1987).

Behaviour: Usually solitary but roost in small flocks at high tide. Their daily movements are influenced by the tides; they feed mainly on falling and low tides.

Population: Moderate numbers on the coasts of Northland, Coromandel Peninsula and the Marlborough Sounds.

Feeding: Diet is mainly small fish, including eels and flounder; also crabs and molluscs. They feed largely by crouching, body and head horizontal, neck retracted, jabbing at prey, sometimes flicking their wings. Sometimes they stalk with the body above the horizontal, the neck curved but not retracted, and the head above the level of the body.

Conservation: Protected native. In New Zealand, Reef Herons are less widespread than they used to be, probably not because of competition with White-faced Herons but largely owing to increased human disturbance on the coast.

Reading: Edgar, A.T. 1978. *Notornis* 25: 25-58.

Breeding: Solitary nesters in caves, in crevices or behind rocks, on rock shelves under an overhang, in cliff-side vegetation