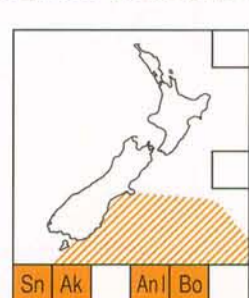


Flightless stocky seabirds with dark upperparts and white underparts. Wings modified into flippers. Robust bill. Short stout legs with webbed feet. Dense short and flattened feathers in adults; thick down in chicks. Swim low in the water, with head and upper back (occasionally tail) visible; some porpoise when swimming fast. Feed at sea by diving. On land, walk upright with waddling gait or short hops with flippers used to maintain balance. Toboggan on ice and mud. Visit land to breed and to moult. During the 2–6-week moult, birds look ragged while all feathers are replaced rapidly; birds fast and are unable to swim. Breed solitarily in burrows or under vegetation, or in large dense colonies on the surface. Lay 1–2 white eggs.

ERECT-CRESTED PENGUIN *Eudyptes sclateri*

Locally common endemic

60 cm, 4.5 kg. Forehead, sides of face, chin and throat jet black; crown and upperparts very dark bluish black; underparts white. Broad bright yellow eyebrow stripe rises at a steep angle over eye to form a short brush-like erectile crest on each side of crown. Whitish skin at base of slender reddish-brown bill. Solid black tip to underflipper, extending well along leading edge. Juvenile has smaller and creamy crest, and throat mottled grey and white. **Habitat:** Breeds NZ subantarctic; main colonies at Bounty and Antipodes Is. After breeding, disperses widely; a few moult each autumn on NZ mainland coast, and regularly seen off NZ mainland in winter. **Breeding:** Oct–Feb. [Sp 83]



PENGUINS

Spheniscidae

16 species confined to the Southern Hemisphere: 13 in the New Zealand region, including 4 endemic and 5 other breeding species.

most nights to roost. They have ritualised displays, and most give a variety of brays, trumpets and growls. Colonial breeders often engage in fights with neighbouring birds.

Penguins are a clearly defined group of flightless, stocky seabirds standing up to a metre high. They are a primitive group dating back to the late Eocene, about 45 million years ago; fossils of three species have been found in the South Island from this era.

They usually lay a clutch of 1–2 whitish eggs each year; a few failed pairs attempt to re-lay. Nests vary from burrows for Little Blue Penguins and some Fiordland Crested Penguins to simple scrapes for most species. The King and Emperor Penguins build no nest and incubate the egg between the top of their feet and their body.

Penguins are covered with a waterproof coat of dense, short and flattened feathers; the wings are modified into flippers, and the tail is short and stiff. They have a large head and a powerful, short, stout bill. Their legs are short and stout, with webs linking the three forward-pointing toes. On land, they walk upright with an ungainly waddling gait, and hop over obstacles, using their flippers to maintain balance. On ice, they sometimes toboggan. In the water, they can swim rapidly, being propelled by their flippers only. Some species porpoise when travelling fast.

Penguins vary from solitary to colonial, some colonies being of millions of pairs. Eggs are small in relation to their body size, and have a long incubation period of 33–65 days depending on the species. Usually both sexes incubate, except that in the Emperor Penguin only the male incubates. Chicks hatch covered in thick down and are fed irregularly by both parents. In colonial species, chicks group together in crèches from about three weeks old until they have their natal moult into full feathers and leave the colony at 2–6 months old.

Penguins dive to catch food. The extreme example is the Emperor Penguin, which has been recorded diving to 450 m and staying submerged for 11 minutes. They feed on fish, crustaceans (especially krill), squid and a wide range of other marine invertebrates.

During the moult of 2–5 weeks in summer or autumn, birds look ragged and 'sick', as almost all the feathers are replaced simultaneously. During this time, the bird fasts and is unable to swim without getting waterlogged. If you find birds moulting, leave them alone, and do not return them to sea; contact

the Department of Conservation if a moulting penguin is in danger from dogs or other predators. Many records of unusual species visiting the New Zealand region are of wandering birds forced to come ashore in autumn to moult.

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83. ERECT-CRESTED PENGUIN *Eudyptes sclateri*

Plate 20

Size: 60 cm, 4.5 kg
Distribution: Endemic to New Zealand, breeding in large numbers on the Antipodes and Bounty Islands, and a few breed on Disappointment Island in the Auckland Islands. While breeding, adults stay in continental shelf waters close to their nesting colonies, and they return to their colonies to moult before dispersing in winter. Some immatures moult away from the breeding grounds and are occasionally recorded beachwrecked or moulting on the east coast of the North and South Islands and at Stewart Island and The Snares. Vagrants have been recorded on the coast of the North Island, at the Chathams, Macquarie Island, on the coast of southern Australia between Victoria and Western Australia, and once even at the Falkland Islands. Formerly bred on Campbell Island.
Population: c. 81,000 pairs. Bounty Islands 28,000 pairs, Antipodes 53,000 pairs, with fewer than 10 pairs elsewhere.
Conservation: Protected endemic with rapidly declining populations, perhaps affected by rising sea temperatures altering their food supply.
Breeding: Little information is available. Laying is in October–November, 2–3 weeks later on Bounty Island than on the Antipodes.

They lay 2 white eggs, the first (77 x 48 mm, 98 g) much smaller than the second (89 x 57 mm, 149 g). The nest is a shallow lined cup, often raised slightly. They nest in huge dense colonies of thousands of pairs among Shy Mollmawks or near Rockhopper Penguins, mostly among boulder-strewn slopes and terraces. Both sexes incubate. The incubation period is c. 36 days. About 10–11 weeks after hatching, the chicks depart in late January to February.

Behaviour: Gregarious, not only breeding in dense colonies of several thousand pairs but also forming small groups at sea. Adults moult at their breeding site for 26–30 days in March–April, c. 6 weeks after their chicks have fledged.
Food: While breeding, they eat krill and squid, and may also take small fish.

In the hand: Adult males have longer, deeper and wider bills than females, with a product (in mm) of over 16,000 being a male, and under 14,000 being a female.

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