

## WATERFOWL

Aquatic birds with a small rounded head, short flattened bill, rounded body, short legs, webbed feet and a waddling gait on land. They fly strongly with neck outstretched. Sexes alike in swans and geese, but male ducks are usually more colourful than females. Lay large clutches. Chicks leave the nest within days but are guarded for several months until they can fly.

### Plate 74

### SPECIES EXTINCT SINCE 1900

New Zealand, like many other isolated island groups, has a long history of bird extinction. About 32 species died out in the 800 years between the arrival of Polynesians and the arrival of Europeans, most notably all the moa species. In the 200 years since European contact, 9 further species have become extinct, 5 of which have probably died out since 1900. The main factors that contributed to extinction were loss of habitat, introduced mammalian predators and overharvesting.

#### AUCKLAND ISLAND MERGANSER *Mergus australis*

Extinct endemic

58 cm. Distinctive slim shag-like bird. Dark red-brown head with long feathers on back of head forming a wispy crest; upperparts dark greyish brown; underparts grey with white mottling. Long slender orange-yellow bill, browner above and serrated along cutting edges; legs orange. In flight, white wing-patch and underwing white mottled grey. Sexes alike. **Habitat:** Restricted to coastal waters and streams of Auckland Is since European settlement. Last recorded 1902. [Sp 140]



## WATERFOWL

## Anatidae

Swans, geese and ducks are found worldwide in freshwater and marine habitats. There are about 160 species, of which 14 (4 endemic, 4 native and 6 introduced) breed or have bred in the wild in the New Zealand region since 1920. A further endemic species (*Mergus australis*) became extinct in the early years of the 1900s, and another 6 species are vagrants to the region.

All species have webbed feet for swimming in freshwater rivers and lakes, or in coastal waters. Their bill is modified for filter-feeding; water and food is sucked in at the tip of the bill and expelled through fine comb-like lamellae at the sides, which catch minute seeds and invertebrates. Although most feed in this way, some species mainly graze on aquatic or terrestrial vegetation and pick seeds (e.g. peas or wheat) off the ground, and the mergansers have serrated bills for catching fish.

In New Zealand, most introduced and some native species of waterfowl are legally harvested during a strictly controlled shooting season. Each year, Fish and Game Councils determine the length and timing of the season and the allowable bag for each species, and monitor the licensing of hunters and annual hunting statistics. A voluntary organisation, Ducks Unlimited, works to create and protect wetland habitats suitable for waterfowl and is also involved in captive breeding programmes for some threatened and rare species.

**Reading** Frith, H.J. 1982. *Waterfowl in Australia*. Sydney: Angus & Robertson. Madge, S. & Burn, H. 1988. *Wildfowl: An Identification Guide to the Ducks, Geese and Swans of the World*. London: Christopher Helm. Johnsgard, P.A. 1978. *Ducks, Geese and Swans of the World*. Lincoln: Univ Nebraska Press. Williams, M. 1981. *The Duckshooter's Bag*. Wellington: Wetland Press.

#### 140. AUCKLAND ISLAND MERGANSER *Mergus australis* Plate 74

**Size:** 58 cm, 900 g

**Distribution:** Auckland Island Mergansers are extinct. Subfossil bones have been found in natural sites and Maori middens widely on the North, South, Stewart and Chatham Islands, showing that Maori hunters and their accompanying dogs probably brought about their extinction on the mainland and at the Chathams. The only historical records are from Auckland and Adams Islands of the Auckland group. European attempts at settlement, together with introduced mammals, led to their decline on the Auckland Islands, but probably the final cause of their extinction was the shooting of about 30 birds for museum specimens. The last pair were shot in 1902. Extensive searches since 1942 have failed to find any birds.

**Breeding:** The nest, eggs and clutch size of

Auckland Island Mergansers were not described. One brood of four ducklings (which lacked the patterned down of northern mergansers) was recorded in summer.

**Behaviour:** Although their wings were reduced, they could fly. They lived on the fiord-like inlets of the eastern and southern coasts of the Auckland Islands, especially on the extensive coast of Carnley Harbour, and also at the head of estuaries and pools of streams.

**Feeding:** Little is known. They apparently fed on fish; also on crustaceans, shellfish and marine worms. As with all mergansers, they used the backward-facing serrations on both mandibles to seize and hold their prey.

**Reading:** Kear, J. & Scarlett, R.J. 1970. *Wildfowl* 21: 78–86. Williams, G.R. & Weller, M.W. 1974. *Notornis* 21: 247–249.