

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.

**AUSTRALASIAN SHOVELER (Kuruwhengi) *Anas rhynchos* Common native**

49 cm; ♂ 650 g, ♀ 600 g. Duck with heavy spatulate bill. Sits low in the water and profile shows no apparent forehead. Breeding male has blue-grey head with a white crescent in front of golden eye; breast off-white with extensive dark brown mottling; flanks bright chestnut with prominent white patch at base of tail. Bill dark grey; legs orange. Eclipse male has head speckled blue-grey, underparts mottled bronzy chestnut, with paler (sometimes almost white) breast, and lacks white flank patch. Female streaked and spotted brown and buff on body; bill grey with some pale orange at base and sides in some birds. In flight, upperwing has sky-blue panel on inner forewing, narrow white wingbars and dark green speculum. Flight swift, wings noticeably narrow and pointed. Whistling wings and jinking flight as it approaches to land. Birds utter a quiet 'cuck-cuck-cuck...'. Feeds by sieving seeds and small aquatic animals through immersed bill. **Habitat:** Mainly shallow lowland wetlands, and muddy estuaries. **Breeding:** Oct–Feb. [Sp 135]



**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.

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.

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.

**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.

**135. AUSTRALASIAN SHOVELER *Anas rhynchos* Plate 31**

**Other names:** Kuruwhengi, New Zealand Shoveler, Spoonbill  
**Size:** 49 cm; males 650 g, females 600 g  
**Geographical variation:** Two subspecies: the nominate *rhynchos* breeds in Australia, and the New Zealand Shoveler *variegata* breeds in New Zealand.  
**Distribution:** Breed in southern Australia, especially in the Murray-Darling Basin, but they disperse northwards in wet years. They are in wetlands throughout both main islands of New Zealand, and straggle to Stewart Island and the Auckland Islands. They became extinct on the Chatham Islands in 1925. Shovelers prefer fertile shallow wetlands and some sewage ponds of the lower Waikato, Hawke's Bay, Manawatu, Wairarapa, Canterbury and Otago, especially those lakes fringed with raupo. Moderate numbers are found on the Rotorua lakes and Lake Taupo. They are uncommon on flowing rivers and high-country lakes of the South Island.

caught 800 km away in Otago the following May, but by August it had returned to its natal lake to breed.  
**Population:** c. 150,000 birds in the 1980s.  
**Conservation:** Partially protected native; c. 30,000 are legally harvested each year in the duck-shooting season, with the take controlled by daily bag limits for licensed hunters. Numbers of Shovelers appear stable. Construction of farm dams and sewage ponds, and increased fertility of many lowland lakes with farm run-off, may be compensating for the loss of natural wetlands.  
**Breeding:** In July and August, Shovelers are in courtship flocks, but by September pairs disperse to establish a territory. The nest is a bowl of grass, lined with down. It is usually in thick rank pasture, tussock or carex away from water. Laying is mainly in October–November, but a few late or replacement clutches are laid until January. They lay 9–11–13 pale bluish-white eggs (52 x 38 mm) about dawn each day. The male guards the female during laying and for about the first fortnight of incubation, but then leaves her to complete the incubation of c. 25 days. The female leads the ducklings from the nest soon

Banding studies have shown that Shovelers are highly mobile within New Zealand, and movements between Southland and the Waikato are not uncommon. A juvenile banded in coastal Manawatu was

after they hatch. Normally the brood is kept in dense vegetation by day but feeds in open water at night.

**Behaviour:** Usually seen in flocks, sometimes of 1000+ birds on large fertile lakes. They tend to shy away from city ponds. Shovelers are often silent by day, but at night they make a soft but far-carrying 'cuck-cuck-cuck...' call.  
**Feeding:** Diet is mainly minute aquatic plants such as *Lemna*, seeds, and zooplankton sieved from the water by dabbling in shallow water or in mud. The food is filtered out on very fine comb-like lamellae at the sides of the bill. Large invertebrates such as water beetles and freshwater snails are also eaten.

The young are initially covered in dark brown down with yellow facial markings and underparts, and the bill quickly develops its distinctive spoon shape. Sometimes crèches of up to 100 well-grown ducklings have been recorded. Chicks fledge at 50–60 days old and disperse widely. About 65% die before they start breeding at 1 year old. Adults survive on average just 21 months, but some birds live much longer, with the oldest recorded in the wild in New Zealand being over 11 years old.

**Reading:** Sibson, R.B. 1967. *Notornis* 14: 22–26.