

A large diverse group of birds of estuaries, coasts, riverbeds and farmland. Most are long-legged and feed in or near shallow water. Bill shape is varied; short and stubby in those (e.g. dotterels) that peck from the surface, but longer in those that feed in shallow water (e.g. stilts), or probe deeply (e.g. godwits). Flight strong and direct. Often form flocks while roosting or flying, but disperse to feed. Many species seen in NZ breed in the Arctic and arrive in September, with remnants of breeding plumage, and depart in March, often in breeding plumage. Most subadults and a few adults spend the southern winter here.

TEREK SANDPIPER *Tringa terek*

Uncommon Arctic migrant

23 cm, 70 g. Plain pale grey-brown wader with long thin upcurved black bill with orange base, short orange-yellow legs, and dark patch at bend of wing. Moves actively with crouched run and bobs head and tail. Non-breeding has head and upperparts pale brownish grey with faint white eyebrow; throat and breast variably streaked grey; underparts white. Breeding has browner back, finely flecked grey, and black streak at base of upperwing appears as a black line along back. In flight, broad white trailing edge to upperwing near body, pale sides to rump and tail. **Habitat:** Breeds Eurasia. A few reach NZ estuaries each summer, often roosting with Wrybills. [Sp 224]



SNIFE, SANDPIPERS, GODWITS and CURLEWS

Scolopacidae

About 79 species, of which 2 breed in New Zealand (non-migratory snipe) and 32 reach New Zealand as migrants for the northern winter.

Group have caught over 4000 Arctic migrants in the Auckland area, and some of these have been marked, to enable resightings, with white plastic leg flags.

Apart from stints (known as peeps in North America), these waders have a slender bill that is as long as or longer than the head. In curlews and godwits, the bill is sensitive and flexible at the tip, and the mandibles open during probing in soft mud or shallow water. All have long, pointed wings, rapid flight, a long neck, long legs and, for birds, a short tail. Their eyes are smaller than those of plovers and dotterels, as suits their more tactile, less visual, feeding. Gregarious when not breeding.

The first Arctic migrants arrive in September-October, but others trickle into the country through November. Most leave in March-April, but a variable proportion of the summer population stays behind to spend the southern winter in New Zealand; most are probably yearlings, as few adopt breeding plumage, and so the number left behind provides an indication of the success of the previous northern breeding season.

Their food has not been studied in detail in New Zealand. They take a variety of mudflat-burrowing crabs, small amphipod and ostracod crustaceans, polychaete worms and small gastropod and bivalve molluscs. Their diet includes insect larvae and pupae of craneflies (Tipulidae), midges (Chironomidae), beetles and flies; they may also take spiders and earthworms. They swallow grass, sedge and rush seeds, but whether by accident or design is not known for certain. The various species probe to different depths according to the length of their bill. Most of the rapid, vigorous, sewing-machine probing of medium and smaller waders is exploratory, as often is the slower, more careful probing of godwits, curlews or whimbrels.

New Zealand is at the southern limit of many species, and some of the distances travelled are huge; it is possible that some of the migrants fly between New Zealand and China, Japan or the Aleutian Chain in a single flight, although most stop at least once to refuel. In order to undertake such a long journey, waders feed voraciously in the weeks before departure and often arrive late to their roosts. They lay down extensive fat deposits, their weight can increase to 50-75% above their normal non-breeding weight. On arrival, they are often exhausted and quite approachable, but quickly regain their condition. The adult Arctic migrants moult all their flight feathers during the southern summer, and so can be distinguished from juveniles, which do not moult or lose only a few feathers until the southern autumn.

The waders that migrate to New Zealand mostly breed in the arctic or subarctic tundra of the Northern Hemisphere and are strongly migratory. Those that breed furthest north tend to migrate furthest into the Southern Hemisphere, from the largest curlews to the smallest stints. The routes taken by the various species of wader are being elucidated by an extensive co-operative programme of banding and leg-flagging throughout the East Asian flyway. The New Zealand Wader Study

The sexes are alike, but females are often noticeably larger than males. The non-breeding plumage, as is mostly seen in New Zealand, is dull, the upperparts mottled or a uniform brown and grey, the underparts paler, sometimes with streaks and spots. Before leaving and while breeding, they are brighter, many species becoming much more rufous above and rufous or black below. The age of first breeding is 1-2-3 years, and many birds live to at least 15 years old.

224. TEREK SANDPIPER *Tringa terek*

Plate 45

Size: 23 cm, 70 g
Distribution: Breed from the Baltic coast of Finland, across Siberia to the Kolyma River. They migrate to the coasts of Africa, Madagascar, Arabia, southern and southeastern Asia, the Philippines and Australasia; especially common in many parts of northern and eastern Australia. Terek Sandpipers are a scarce but annual visitor to New Zealand, especially to estuaries of Northland and Auckland, Manawatu Estuary and Farewell Spit, and south to the Southland lagoons. The largest flock recorded was eight at Kaipara Harbour in 1986. A few overwinter.

Behaviour: Terek Sandpipers often remain alert and active at high-tide roosts, which they usually share with Wrybills. They bob their heads and teeter up and down with their tail. Their call is a musical trill: 'weeta-weeta-weet'.
Feeding: The restlessly active feeding of these birds draws attention as they keep abruptly changing direction to dash after animals they have seen, which they get by pecking eagerly at the surface. They also probe deeply into soft mud. They favour places where shallow water covers mud such as tidal creeks, both within and apart from mangroves, coastal lagoons and estuarine mudflats.