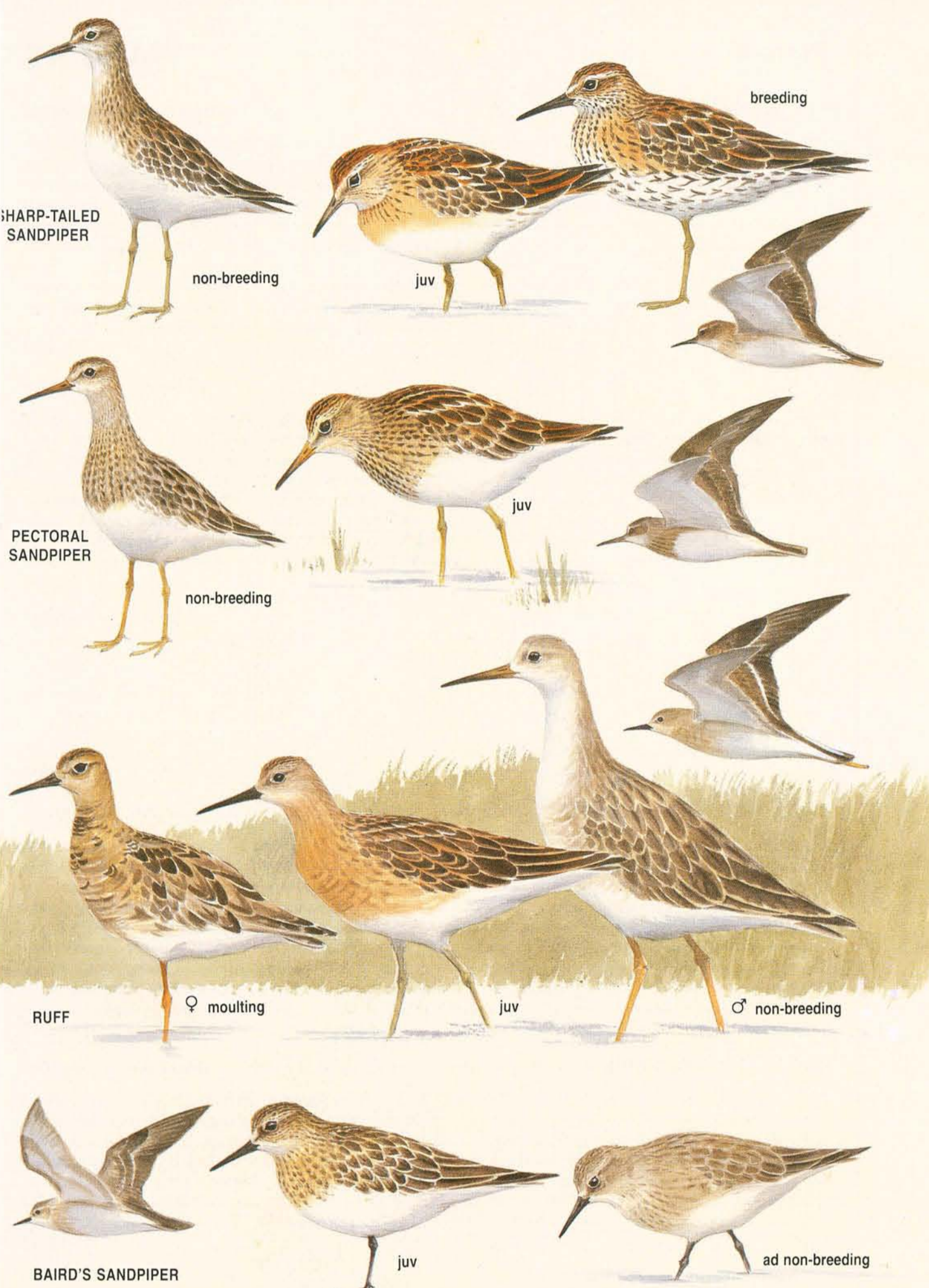


A large diverse group of birds of estuaries, coasts, riverbeds and farmland. Most are long-legged and feed in or near shallow water. Bill shape is varied; short and stubby in those (e.g. dotterels) that peck from the surface, but longer in those that feed in shallow water (e.g. stilts), or probe deeply (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.

SHARP-TAILED SANDPIPER *Calidris acuminata*

Uncommon Arctic migrant

22 cm, 60 g. A medium-small richly speckled brown wader with *rufous crown*, finely streaked black, and white eyebrow. Bill (2.5 cm) slightly downcurved, *grey-brown with greenish base*. Legs *yellowish green*. Non-breeding has upperparts dull brown with pale feather edges; neck and breast mottled grey or buffish with irregular streaks, *fading* to white on lower breast and belly. In breeding plumage, upperparts richly coloured with chestnut and buff edges to feathers; breast heavily streaked and marked with *small boomerang-shaped streaks on lower breast and along flanks*. Juvenile like non-breeding adult but more rufous, especially on crown, neck and *edges of tertials*. In flight, faint white wingbar and white sides to black rump and uppertail. **Habitat:** Breeds Siberia. Migrates to Australasia. In NZ, favours low-growing saltmarsh of estuaries and open marsh-turf flats of coastal lakes, mainly at Kaimaumau, Firth of Thames, Ahuriri and Manawatu Estuaries, Lakes Wairarapa and Ellesmere, and Awarua Bay. [Sp 199]



SNIPE, 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 crane flies (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.

199. SHARP-TAILED SANDPIPER *Calidris acuminata* Plate 46

Size: 22 cm, 60 g
Distribution: Breed in northeastern Siberia, in a limited range from the Lena to the Kolyma Rivers. Most birds migrate to New Guinea and Australia, particularly in eastern South Australia, Victoria and southern New South Wales, but some reach New Zealand, Vanuatu, New Caledonia and Fiji. In New Zealand, they are a regular migrant in small numbers. Small flocks of 10-30 birds are often recorded on Parengarenga and Manukau Harbours, the Firth of Thames, Lakes Wairarapa and Ellesmere, and on the Southland coastal lagoons and estuaries. Smaller numbers are found at other estuaries or coastal lagoons from Northland to Southland in October-March. A transient at the Kermadec Islands; a straggler to The Snares and the Chathams. Few overwinter.

Population: Sharp-tailed Sandpipers are the eighth most numerous Arctic wader to reach New Zealand: 50-200 each summer, but usually fewer than 10 overwinter.
Behaviour: Gregarious, often feeding and roosting quietly in small flocks at pools in beds of *Sarcocornia*, or roosting on shellbanks or sandbanks with Wrybills, Lesser Knots, Curlew Sandpipers and Red-necked Stints. They are usually silent in New Zealand, but birds, when flushed, may utter a soft, metallic 'pleep-pleep'.
Feeding: Sharp-tailed Sandpipers forage on the shallow edges of lagoons, both fresh and brackish, preferring low-growing saltmarsh vegetation to open mudflats, although in New Zealand they may also visit higher parts of the shore away from the tideline.