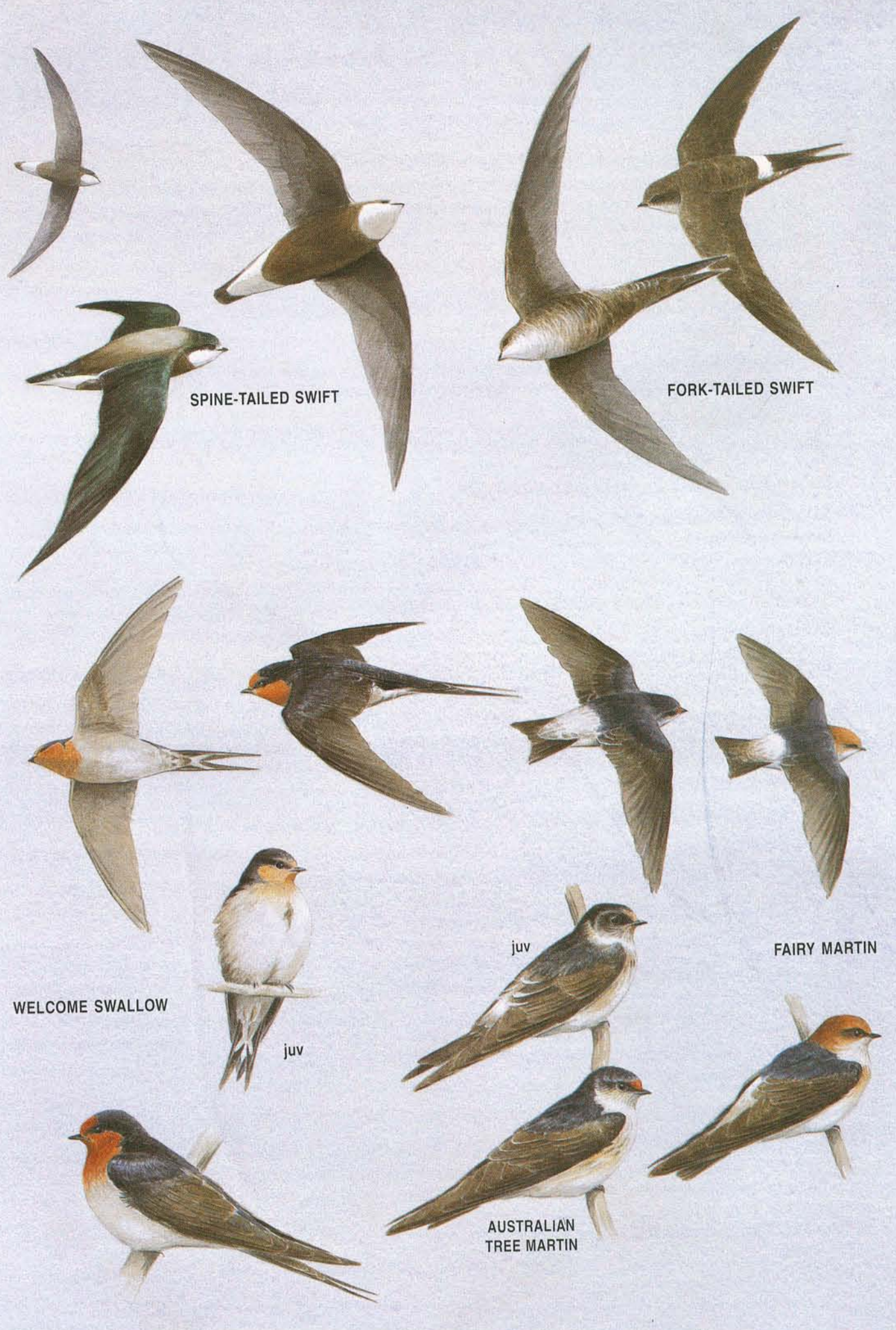


Swallows and martins are small birds with rapid erratic darting and gliding flight in pursuit of flying insects or snatching them from the surface of water or the ground. NZ species mostly blue above, pale below; each species has distinctive combination of pattern of red on head, colour of rump, and shape of tail. Sexes alike. Juveniles duller. Perch and come to ground readily; often seen gathered on powerlines, fences, shed roofs and riverbed shingle. Build distinctive mud nests under bridges, in caves or rock outcrops, trees or around buildings. Lay 3-5 pale pink eggs, speckled brown.

WELCOME SWALLOW *Hirundo tahitica*

Abundant native

15 cm, 14 g. Adult has head and back blue-black; forehead, throat and chest rufous; underparts dull white; *deeply forked tail* with a row of white spots near the tip. Juvenile duller on upperparts, paler rufous markings, and tail less deeply forked. Often in swirling groups low over open water or crops, or sit on wires like clothes pegs. **Habitat:** Open country, especially near water. Often builds cup-shaped mud nest under bridges and under eaves of houses. **Breeding:** Aug-Mar. [Sp 287]



SWALLOWS and MARTINS Hirundinidae

74 species worldwide; 1 is a recently self-introduced native, and 2 are vagrants to New Zealand.

to catch aerial insects in their short, wide bill. They are birds of open country, especially hunting over lakes, rivers and grassland; on warm, calm days they often fly high, but in poor weather they hunt close to the ground or water surface where flying insects are concentrated. Their feet are very small, and they shuffle about when they rarely land on the ground; they usually perch between feeding bouts on posts and on powerlines. Swallows and martins build distinctive mud nests, formerly mainly in trees or in cliff overhangs, but now often under bridges or culverts or under the eaves of buildings.

Swallows are usually larger than martins, but the two terms are interchangeable and follow no taxonomic differences. They are generally small, graceful, dark blue and white birds, with variable amounts of rusty red on their head and breast. They have a streamlined body with short neck and long, pointed wings with 9 primaries. Most have a deeply forked tail, but some have a square tail. Their flight is graceful and rapid as they wheel and dart

287. WELCOME SWALLOW *Hirundo tahitica* **Plate 64**

Other names: House Swallow (Asia), Pacific Swallow (Pacific)
Size: 15 cm, 14 g
Geographical variation: Several subspecies, of which *neoxena* breeds in Australia, Tasmania, Lord Howe Island and New Zealand.
Distribution: Breeds in southern Asia from India to Malaysia, in Australasia and the western Pacific. They have only recently colonised New Zealand, with breeding first recorded in 1958. Before then, they had been only a rare vagrant: Northland (1920), Auckland Islands (1943), Awhitu Peninsula (1944), Lake Ellesmere (1953), Stewart Island (1953) and Farewell Spit (1955). There were probably several invasions in the late 1950s and early 1960s. They were first recorded breeding at Awanui, near Kaitaia, in 1958, and by 1965 were well established throughout Northland. They bred at Lake Ellesmere in Canterbury in 1961, in Hawke's Bay and Manawatu in 1962, and in Wairarapa in 1964.

been spectacular, and they are now common in open country of lowland parts of the North and South Islands, except Otago and Southland, where they are uncommon. They are still scarce but expanding into high country of the Volcanic Plateau and the Mackenzie Country and Central Otago. Vagrants have reached the Kermadec, The Snares, Auckland and Campbell Islands. Breeding on the Chathams since about 1976.
 In Australia, they are partial migrants, with some birds moving north in winter, but many remaining in the south. Welcome Swallows are probably also partial migrants in New Zealand, as they are quite often recorded at sea north of New Zealand in autumn and regularly appear at Norfolk Island in winter. Some birds have been seen leaving Farewell Spit for the North Island in late autumn; however, a southwards movement has been recorded in coastal Otago in autumn, and each winter moderate numbers of birds appear in Southland, where few breed.

The spread of the Welcome Swallow has



Population: Widespread and locally common, especially in lowland farmland with numerous small streams or drains, and in wetlands.
Conservation: Protected self-introduced native. Welcome Swallows sometimes cause a minor nuisance by building their nests on houses, and so fouling doorways and patios, but generally live up to their name and are regarded as a welcome addition to our birdlife.
Breeding: Pairs begin prospecting for suitable

nest sites in August, and several days are spent courting, including courtship feeding, before nest-building commences. Both birds help to build the half-cup mud nest, which is strengthened with dry grass. It is lined with dry grass, rootlets, hair, wool and a layer of feathers. The nest is attached to a rough vertical surface, usually within 15 cm of the top, normally under a small bridge or culvert, under eaves of houses, sheds and garages, inside water tanks, under jetties and in boats.

Some nests are built in natural sites such as caves, rock outcrops or under overhanging banks.

there is just one pair to each site. During the breeding season, juveniles form summer flocks, and from late December adults start to join them; however, some pairs remain close to their breeding site all year. Flocks of up to 500 birds congregate in autumn and winter at good feeding sites such as over sewage ponds, lakes, rivers, sand dunes and root crops. Temporary roosting flocks often form during the day on powerlines, especially in a sheltered spot, but at night they often roost in huge aggregations of several thousand birds in raupo swamps. In the breeding season, pairs indulge in high-level chasing flights or slow, almost hovering flights accompanied by tail-fanning; the male quite often follows the female in these flights. The pair often sit together on a perch and twitter quietly, occasionally rubbing bills. The main call is a twittering 'twisit'.

Eggs are laid in August-February, during which they raise up to 3 broods, sometimes in the same nest. The female lays 2-4-7 pale pink eggs (18 x 13 mm, 1.6 g), variably flecked reddish brown. Clutches of up to 10 eggs are probably laid by two females, or a fresh clutch has been laid in an abandoned nest. Clutch size is higher in New Zealand (4.1) than in eastern Australia (3.7) or western Australia (3.2), but seems to have declined as they have become well established. The second clutch of the season (4.7) is larger than the first (3.8) or third (3.3). Eggs are laid daily, usually about an hour after sunrise. The female alone incubates in spells of c. 8 minutes, with 4-minute feeding spells, for 15-17-19 days. The eggs hatch over 48 hours in the order they were laid. The female broods the young, but both birds feed them during the fledging period of 18-21-23 days. For several days after first flying, the young return to the nest to roost. They continue to be fed for c. 3 weeks, even though re-nesting may have begun. Welcome Swallows probably breed at 1 year old. The oldest bird recorded in New Zealand lived 6 years.
Behaviour: Welcome Swallows maintain a small territory around their nest and sometimes tolerate other pairs nesting in the same culvert, as close as a metre away, but usually

Feeding: Diet is entirely invertebrates such as flies, including midges and blowflies, small beetles and moths. They catch most of their prey by hawking with their characteristic dipping, diving, darting flight. Sometimes they catch insects from the surface.

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