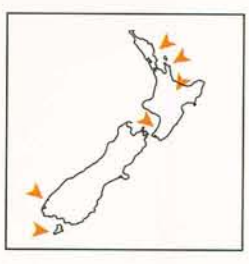
Text and images extracted from Heather, B.D. & Robertson, H.A. (2005) *The Field Guide to the Birds of New Zealand*. Penguin Books, Auckland. Pages 146, 156, 157, 416, 418, 419.

Passerines are the largest group of birds. They are small to medium sized land birds found worldwide, except on Antarctica. All species have four toes, three pointing forward and one back, well-adapted for perching. Most species are song-birds, with complex musical calls, but there are exceptions (e.g. crows). They show great diversity of form, behaviour and breeding biology.

SADDLEBACK (Tieke) ***Philesturnus carunculatus*** **Rare endemic**



25 cm; ♂ 80 g, ♀ 70 g. Head and body glossy black with *bright chestnut saddle*, rump and tail coverts; *pendulous orange-red wattles at base of black bill*. North I subspecies has thin buff line at upper edge of saddle. North I juvenile has smaller wattles and lacks buff line; South I juvenile (Jackbird) *chocolate brown*, paler below, with reddish-brown tail coverts, and small wattles. Often feeds on the forest floor, and bounds from branch to branch rather than flies. Main call is a *strident ringing 'cheet, te-te-te-te'*; often duet. **Habitat:** Forest and scrub on several offshore islands. **Breeding:** Aug–May. **[Sp 322]**

WATTLEBIRDS Callaeidae

3 species, all endemic to New Zealand.

The origin of the wattlebirds and their relationship with other perching birds are obscure and ancient. They have colourful fleshy wattles at the gape, short, rounded wings, limited flight and prefer to progress with leaps and bounds on strong legs. The tail is long and drooping. The bill size and shape is highly variable within the group, but all feed on forest invertebrates and fruits. Their calls are loud and varied.

322. SADDLEBACK *Philesturnus carunculatus* Plate 70

Other names: Tieke, Jackbird (South Island juvenile)
Size: 25 cm; males 80 g, females 70 g
Geographical variation: Two subspecies: the North Island Saddleback *rufusater* of the North Island and offshore islands, and the South Island Saddleback *carunculatus* of the South and Stewart Islands and offshore islands.
Distribution: Subfossil and midden records show a wide distribution in the North, South and Stewart Islands. At the time of European settlement, Saddlebacks were plentiful and widely distributed in the forests of the main islands and on many offshore islands. They declined during the 1800s after the spread of Norway rats and feral cats, and by 1870 they had largely gone from north of the Waikato. The decline accelerated late in the century as ship rats and mustelids spread, and they had gone from the rest of the North Island and all but one offshore island by 1910. About 500 North Island Saddlebacks survived on Hen Island. Since 1964, they have been successfully transferred to nine islands: Whatupuke (1964), Red Mercury (1966), Cuvier (1968), Lady Alice (1971), Stanley (1977), Kapiti (six releases 1981–89), Little Barrier (four releases 1984–88), Tiritiri Matangi (1984) and Mokoia in Lake Rotorua (1992). Coppermine Island in the Chickens Group was colonised when birds flew the 150 m gap from neighbouring Whatupuke Island. Transfers to Motukawanui Island in the Cavalli group (1983, 1984) failed when a stoat invaded in 1986, and transfers to Fanal Island in the Mokohinau group (1968, 1985) failed for unknown reasons.

South Island Saddlebacks disappeared from the main islands somewhat later than *rufusater* in the North Island. However, they survived on Big South Cape Island (930 ha) and two adjacent islets, Pukeweka (2 ha) and Solomon (25 ha), off the southwest corner of Stewart Island, until the accidental arrival of the ship rat in 1963. In 1964, 36 were shifted successfully to nearby Big and Kaimohu Islands, and in 1965, 30 were shifted unsuccessfully to the Inner Chetwode Islands, Marlborough Sounds. Since 1965, they have been transferred to many islands off Stewart Island, to Breaksea (1992) and South Passage (2001) Islands in Fiordland (1992), and in Marlborough Sounds, to the Inner Chetwodes again (1969; unsuccessful), to Maud Island (1980, 1982; unsuccessful) and to Motuara Island (1994).
Population: c. 5000 North Island Saddlebacks, but only c. 650 South Island Saddlebacks in 1992.
Conservation: Protected threatened endemic. The decline of Saddlebacks seems to have been linked to the spread of rats, cats and mustelids. Although they can survive in tall forest in the presence of Pacific rats, numbers increased dramatically in young forest on Red Mercury Island in the three years after the Pacific Rats were eradicated. Because of island transfers, provision of nest boxes, and better rodent control, and plans to eradicate rodents from many island reserves, both subspecies are now secure.
Breeding: Saddlebacks nest in tree holes, rock crevices, tree-fern crowns and dense epiphytes, usually close to the ground. They make their nests of rootlets, leaves and twigs, lined with fine grasses, bark fibres and tree fern scales. Eggs are usually laid in October–January, and one brood is raised, but at recently colonised sites where resources are unlimited they can breed from August to May and raise up to 4 broods. They lay 1–**2**–**3**–4 grey or white eggs (30 x 22 mm) with dark blotches and streaks, mainly at the larger end. Females alone incubate for c. 18 days (North Island) or c. 20 days (South Island). Both adults feed the young, which fledge at c. 26 days old. The oldest bird lived at least 17.5 years.
Behaviour: Pairs hold their territory all year and defend it loudly. The main call is a loud, far-carrying 'cheet, te-te-te-te'; the long, steady, introductory note is followed by up to 30 short notes. Saddlebacks are active and inquisitive. They prefer to bound along branches, from branch to branch and across the forest floor rather than fly. Flights are noisy, rapid and usually short, seldom sustained for more than 50 metres. Saddlebacks roost in cavities that are often on or near the ground, under overhanging stream banks or several metres up in tree holes or beneath epiphytes.

Feeding: Diet is mainly invertebrates, but in season they also take a wide variety of fruits and nectar. They take invertebrates from the forest floor to the canopy. On the forest floor, they rummage in the litter and dig into rotting logs with their strong, chisel-shaped bills. On trunks and branches, they examine crevices, sometimes inserting one mandible only, or forcibly open their bills to prise off bark or to unroll dead, curled leaves. This feeding is vigorous and noisy, often attracting Fantails or Whiteheads, which feed on insects that have been disturbed. They hold large insects such as weta with one foot and pull them apart with the bill.

In the hand: Males have longer tarsi, with little overlap: 40–**41.8**–44 cf. 36.5–**38.8**–40.5 mm.

Reading: Blackburn, A. 1965. *Notornis* 12: 191–207. Jenkins, P.F. 1978. *Anim Behav* 26: 50–78. Jenkins, P.F. & Veitch, C.R. 1991. *NZ J Zool* 18: 445–450. Lovegrove, T.G. 1996. *Biol Cons* 77: 151–157. Lovegrove, T.G. 1996. *Notornis* 43: 91–112. Merton, D.V. 1965. *Notornis* 12: 208–212. Merton, D.V. 1965. *Notornis* 12: 213–222. Rasch, G. & McClelland, P. 1993. *Notornis* 40: 229–231. Roberts, A. 1994. *South Island Saddleback Recovery Plan*. Wellington: DoC.