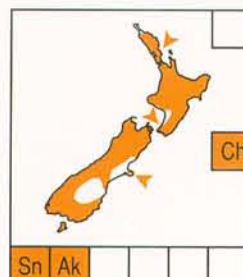


Passerines are the largest group of birds. They are small to medium sized land birds found worldwide, except on Antarctica. All species have four toes, three pointing forward and one back, well-adapted for perching. Most species are song-birds, with complex musical calls, but there are exceptions (e.g.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

**TOMTIT (Miromiro – North I, Ngiru-ngiru – South I) *Petroica macrocephala* Common endemic**

13 cm, 11 g. Small forest bird with a large head and short tail. Five subspecies vary slightly in size and colour; the most distinctive is the Snares subspecies, which is wholly black but glossier in the male. Adult male (North I) has black head with small white spot above bill; glossy black upperparts and upper breast; white underparts, sharply divided at breast; white wingbar and sides to tail. South, Chatham and Auckland Is subspecies similar, but have underparts yellowish, brighter or orange on upper breast near dividing line. Juvenile males similar, but have white shaft streaks to black feathers and always have white underparts. Adult females (North and South Is) have brown head and upperparts; grey-brown chin and upper breast fading to white on underparts; wingbar and sides of tail pale buff. Chatham I female similar but darker brown above. Auckland Is female like male but dull black upperparts and upper breast. Feeds in the understorey by perching on branch or trunk, scanning, then flying to ground or tree to catch invertebrates. *Male song a loud jingling burst: 'ti oly oly oly oh'*, varies regionally. Male call a short high-pitched 'swee'; female call a reedy 'seet'. **Habitat:** Scrub, native and exotic forest and scrub. **Breeding:** Sep–Feb. [Sp 305]



**AUSTRALASIAN ROBINS *Eopsaltriidae***

About 44 species in Australasia; 3 endemic to New Zealand.

Australasian robins are small, robust, confident forest birds with short necks and large heads, and an upright stance on moderately long, thin legs. Their bill is short, broad at the base and surrounded with abundant

bristles. Males are mostly black, grey and white with patches of red or yellow, whereas females have a duller basic colour and lack bright colours. Although superficially similar, this group is not closely related to the European Robin *Erithacus rubecula*, which belongs to the thrushes (Muscicapidae).

**305. TOMTIT *Petroica macrocephala* Plate 69**

**Other names:** Miromiro, Pied Tit (North Island); Ngiru-ngiru, Yellow-breasted Tit (South Island); Black Tit (The Snares)

**Size:** 13 cm, 11 g; 20 g (The Snares)

**Geographical variation:** Five subspecies, each restricted to an island and its outliers: North Island Tomtit *toittoi*, South Island Tomtit *macrocephala*, Chatham Island Tomtit *chathamensis*, Snares Island Tomtit *danneferdi*, and Auckland Island Tomtit *marrineri*.

**Distribution:** New Zealand only. Subfossil, midden and historical records show that Tomtits were throughout the mainland of New Zealand at the time of European settlement. In the North Island, they are widespread and locally common from Kaitiā to Cape Palliser, although they are scarce between Whangarei and the southern Waikato, sparsely distributed in the lowlands and coastal hill country of the east coast from East Cape to southern Wairarapa, and absent from agricultural districts in the lowlands of Rangitikei, Manawatu and Horowhenua. Moderate numbers on the Hen and Chickens, Little Barrier and Kapiti Islands, and a few persist on Great Barrier Island. Introduced to Tiritiri Matangi in 2004.

The South Island Tomtit is common to the west of and in the Southern Alps from Farewell Spit and the western part of the Marlborough Sounds to Fiordland, and on Banks Peninsula, in Southland and the Catlins; throughout Stewart Island and its outliers, and on the Solanders Group.

The Chatham Island Tomtit was common throughout the group in the 1800s but disappeared from Chatham Island in the 1970s and was removed from Little Mangere and Mangere Islands in 1976 so that they would not compete with the critically endangered Black Robin, leaving it only on Pitt and South East Islands; but subsequently reintroduced to Mangere Island. The Snares Island Tomtit is throughout the group, and the Auckland Island Tomtit is on Auckland, Adams, Ocean, Rose, Ewing and Enderby Islands.

Throughout New Zealand, Tomtits are in mature native forests, especially open beech forest, in second-growth manuka/kanuka

scrub, and in some districts they use older stands of exotic plantations. On The Snares and the Auckland Islands, they feed in tussock grassland with scattered shrubs, and out onto coastal rocks and even floating kelp.

**Population:** Widespread and locally common, especially in beech forests of the central North Island and the South Island. The Snares Tomtit numbered c. 500 pairs in 1987.

**Conservation:** Protected endemic. Tomtits declined with the clearance of much lowland forest and the introduction of mammalian predators, but they have adapted well to the changed conditions, and their populations have probably stabilised. The Chatham Island Tomtit has declined through the 1900s to have a restricted distribution on some predator-free islands.

**Breeding:** Tomtits have been studied on the mainland, the Chathams and The Snares. They maintain their territory all year, and usually keep the same partner year after year. From July onwards, males start to sing their territorial song, and territorial defence and singing increase markedly in August. The female takes about 4 days to build its bulky cup nest of twigs, bark, fibres and moss, bound together with cobwebs and lined with tree-fern scales, moss, fine grasses and occasionally with feathers or wool. It is 1–10 m (usually 2–4 m) off the ground in a sheltered cavity in a tree where a branch has broken off and rotted out, in a fork, attached to the trunk of a tree fern or in a thick tangle of vines such as *Muehlenbeckia* or bush lawyer.

North and South Island Tomtits lay in September–January, during which each pair raises up to three broods, but if their nests fail, they re-lay up to six times in a season. They lay 3–4–6 cream eggs (18 x 15 mm) with yellowish-purple spots at the larger end. Eggs are laid daily, usually shortly after sunrise. The female incubates for 15–16–17 days, and broods the chicks. She is regularly fed near the nest by the male, and both parents feed the nestlings. The fledging period is 17–18–20 days. Fledglings are fed by both birds, but once the female starts re-nesting, the male takes full care of them. Juveniles start foraging at

c. 28 days old, but continue to be fed until c. 35 days old. Once independent, they soon disperse from their natal territory.

Chatham Island Tomtits lay from late September to mid-December and raise two broods. They lay 2–3–4 eggs (19 x 15 mm). The female incubates for 17–18 days, and the chicks fledge at 16–21 days old.

Snares Island Tomtits have similar breeding behaviour, but most nests are within a metre of the ground in hollows in logs or stumps, or among roots of wind-thrown trees. They lay from mid-October to mid-December and usually raise only one brood each year, but in 'El Niño' years, which are exceptionally windy and wet on The Snares, they may not breed at all. They lay 2–3 eggs (20 x 15.5 mm). The female incubates for 18–20 days, and the chicks fledge at 17–22 days old.

Tomtits start breeding at 1 year old. The oldest Tomtit recorded to date lived just 3 years, but some probably live 10+ years.

**Behaviour:** Adult Tomtits remain on their territory all year, but only actively defend it from about July to February, when the male patrols his patch and sings from prominent perches. The main territorial song of the male is a loud and clear burst: 'ti oly oly oly oh', often answered by a neighbouring male; a much softer version of this song is sometimes sung by the female. Tomtits have a variety

of other calls, the main ones being a simple, short, high-pitched 'swee' used by males and a reedy 'seet' used by females as a contact call. In aggressive encounters between birds, they raise their encounter feathers, but in encounters with other species, including humans, all but Snares Tomtits flash the white frontal spot in the centre of their forehead.

**Feeding:** Diet is mainly invertebrates, supplemented with small fruits in autumn and winter. Main prey are spiders, beetles, caterpillars, moths, weta, earthworms, flies and wasps. On the mainland and at the Chathams, the main search method is 'watch and wait' – perching and scanning an area, and then flying to catch the prey, usually on a nearby trunk or branch. They also glean insects from leaves and small branches, occasionally hover and only rarely catch insects on the wing. On The Snares, Tomtits often forage on the ground and hop about in the leaf litter, as Robins do elsewhere. They also feed on flies that abound in penguin colonies, and perch on seals and sea lions to catch associated blowflies.

**Reading:** Best, H.A. 1975. *Wildlife – A Review* 6: 32–37. Fleming, C.A. 1950. *Trans Roy Soc NZ* 78: 14–47; 127–160. Kearton, J.M. 1979. Unpubl. MSc thesis, Univ Canterbury. McLean, I.G. & Miskelly, C.M. 1988. *NZ Natural Sciences* 15: 51–59. Miskelly, C.M. 1990. *Emu* 90: 24–27.