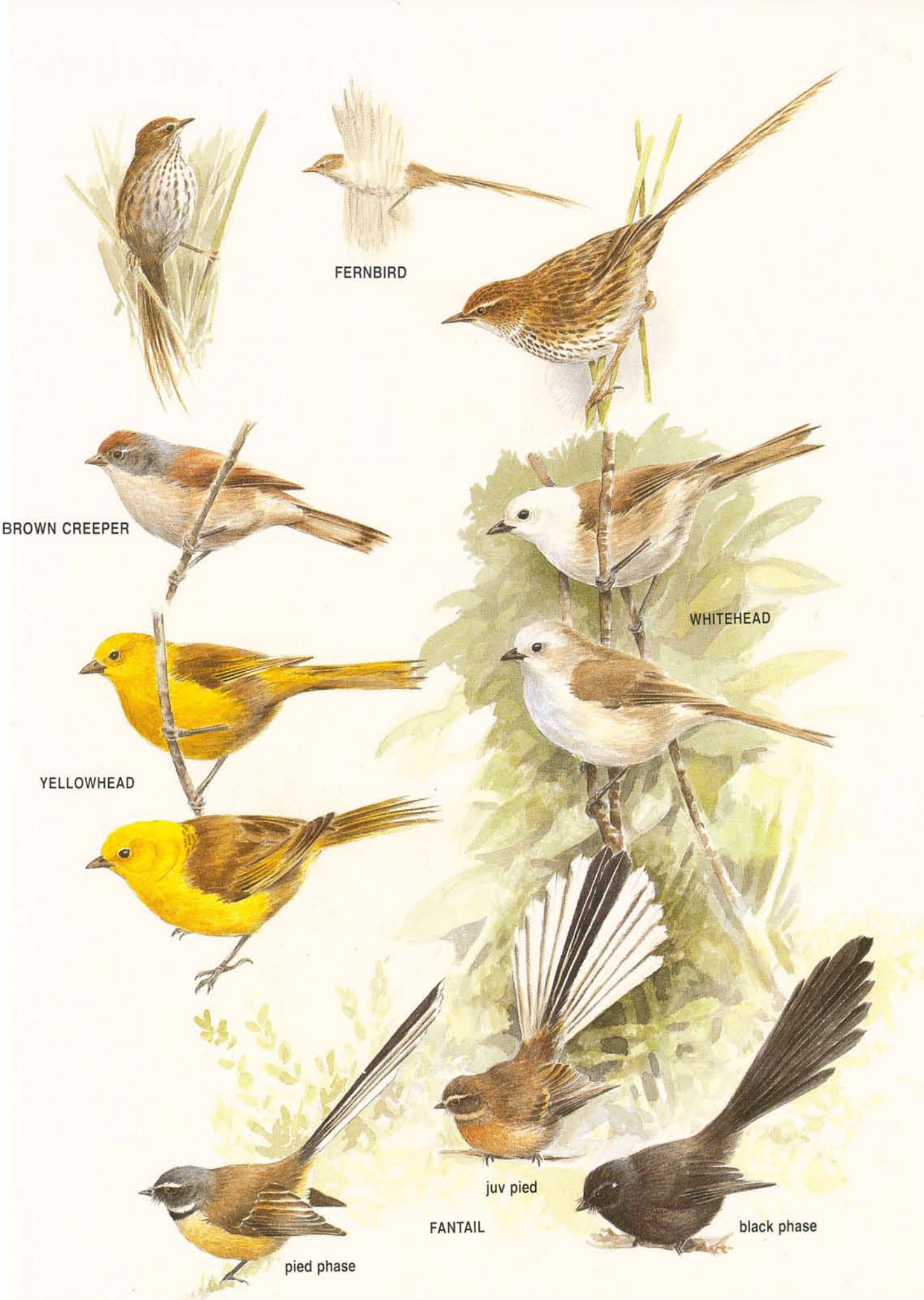


Passerines are the largest group of birds. They are small to medium sized land birds found worldwide, except on Antarctica. All species have four toes, three pointing forward and one back, well-adapted for perching. Most species are song-birds, with complex musical calls, but there are exceptions (e.g.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

BROWN CREEPER (Pipipi) *Mohoua novaeseelandiae* Locally common endemic

13 cm; ♂ 13.5 g, ♀ 11 g. Crown, back, rump and tail reddish brown; ash grey on face and neck; small white stripe behind eye; light buff underparts; dark bar near tip of tail. Sexes and juveniles alike. Usually in small fast-moving *noisy* flocks high in canopy, uttering nasal notes and rapid slurred trills. Male song includes slurs, musical whistles and harsh notes: 'chi-roh-ree-roh-ree-ree', the second note being lower than the first. Females sing a rapid sequence of brief notes, the last being higher and prolonged. **Habitat:** Forest and scrub of South and Stewart Is. **Breeding:** Sep–Feb. [Sp 300]



WHISTLERS and allies

Pachycephalidae

28 species confined to Southeast Asia, Australasia and the southwestern Pacific; 3 endemic species in New Zealand.

stout bills for catching insects amongst foliage and from crevices on branches and trunks. Most species have loud and varied calls, usually melodious but sometimes harsh and scolding.

These small, robust forest and scrub birds have relatively large rounded heads and short

300. BROWN CREEPER *Mohoua novaeseelandiae* Plate 68

Other name: Pipipi
Size: 13 cm; males 13.5 g, females 11 g
Distribution: South Island, Stewart Island and some offshore islands only. Although widespread at the time of European settlement, Brown Creepers have declined with the loss of lowland forest and the introduction of mammalian predators. They are now widely but patchily distributed in native forests, exotic plantations and scrub from sea level to the treeline on the South Island mainland, mostly to the north and west of the Southern Alps, in beech forest on river flats to the east of the alps, in Fiordland and on Stewart Island and some of its outliers. They are also in dry scrub of Marlborough and Banks Peninsula, in pine forests of Nelson and Otago, and in native forests in the Catlins and around Dunedin.
Population: Widespread and locally common on the South Island mainland and Stewart Island, abundant on Codfish Island.
Conservation: Protected endemic. Brown Creepers declined about the time of European settlement with the loss of much lowland forest and the introduction of rats, cats and mustelids. Little is known of population trends, but they seem to have stabilised in their current distribution.
Breeding: Pairs defend their territory all year. From early September, females start building the nest, taking 5–10–17 days. The nest is a compact deep cup of strips of bark, small twigs, grasses, moss, leaves and leaf skeletons and lichen, bound with cobwebs and lined with dried grasses, feathers and wool. It is

placed in a dense patch of vegetation in the canopy of the forest or sometimes in a shrub or low tree 1–10 m above the ground. During nest-building, the following 2–3 days before eggs are laid and the first part of the laying period, the male closely guards the female. Laying is from late September to late January, with peaks in early October and late November representing successive clutches.
 They lay 2–3–4 eggs (18.5 x 14 mm, 2.0 g) at 24-hour intervals. The eggs are white to dark pink, variably speckled reddish brown. The female alone incubates for 17–19–21 days, and broods. Both sexes feed the young, which fledge at 18–20–22 days old. The chicks are mainly fed by the male when the female renests, but some non-breeding birds also help to feed chicks. The chicks are occasionally fed to the end of winter. The young stay as a group once they have become independent and often coalesce with other juvenile groups to form autumn and winter flocks of up to 50 birds. Brown Creepers are capable of breeding at 1 year old. At Kaikoura, adult survival was over 82%, giving a life expectancy of 5 years.
 Brown Creepers are the main host of the Long-tailed Cuckoo in the South and Stewart Islands, and a pair can sometimes be seen in summer feeding a cuckoo chick many times larger than themselves.
Behaviour: Adults are normally strongly territorial all year, but some that breed at high altitude move downhill and form flocks in winter. Brown Creepers often associate with other feeding forest birds, especially Silver-

eyes, parakeets, Grey Warblers and Fantails. They are vocal all day and all year, except during the late summer moult. Territorial song peaks in spring. Only males give the loud territorial song, which varies from bird to bird, and is a phrase including slurs, musical whistles and harsh notes, described as 'chi-roh-ree-roh-ree-ree'. Females sing a rapid sequence of brief notes, the last being high-pitched and prolonged, often in a duet with the male. A wide variety of 'chi's, chatters, trills and harsh 'zick's are given.
Feeding: Diet is mainly invertebrates but includes some fruit. Main prey are beetles, spiders, flies, moths and caterpillars, gleaned from leaves and especially from small branches in the canopy, sometimes by hanging upside down. Brown Creepers occasionally

feed on insects under loose bark on trunks and large branches, and only rarely feed on the ground. Some ripe fruit of native shrubs such as coprosmas are eaten, especially in autumn.
In the hand: Males are larger and heavier than females. Wing length and weight showed no overlap in a sample of 26 males and 18 females at Kaikoura: 59.5–61–64 cf. 54.5–57–58.5 mm and 12–13.4–15 cf. 10.5–11.0–12 g respectively. Before May, juveniles could be distinguished by their yellow bill flanges and dark brown (not light brown) legs and feet.
Reading: Cunningham, J.B. 1984. *Notornis* 31: 19–22. Cunningham, J.B. 1985. Unpubl PhD thesis, University of Canterbury. Gill, B.J. *et al.* 1980. *Notornis* 27: 129–132.