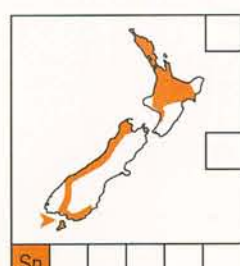


Passerines are the largest group of birds. They are small to medium sized land birds found worldwide, except on Antarctica. All species have four toes, three pointing forward and one back, well-adapted for perching. Most species are song-birds, with complex musical calls, but there are exceptions (e.g.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

FERNBIRD (Matata) *Bowdleria punctata*

Locally common endemic

18 cm, 35 g. Warm brown above, paler below, heavily streaked and spotted dark brown; *forehead and crown chestnut*; whitish eyebrow stripe. Distinctive *long frayed tail*. Sexes and juveniles alike. Secretive, often remaining hidden in thick vegetation or moving mouse-like through the rushes, appearing inquisitively in the scrub canopy. Reluctant to fly. Flight weak and whirring, tail drooping. Often detected by sound alone. Common call a short sharp 'tchip', and *metallic double-note 'uu-tick'* often produced by pair in duet. **Habitat:** Freshwater and tidal wetlands, especially reedbeds or pakihi with emergent scrub; also drier sparse scrub and bracken. **Breeding:** Aug–Mar.



[Sp 297]



OLD WORLD WARBLERS

Sylviidae

339 species worldwide; the Fernbird is endemic to New Zealand. The closely related, but much larger, Chatham Island Fernbird *B. rufescens* is believed to have become extinct in about 1900, and so is excluded from this book.

A large and diverse group of small songbirds. Most have a small, thin bill, and they move actively through vegetation as they search for insects. Their song is usually musical and loud, although the Fernbird is an exception.

297. FERNBIRD *Bowdleria punctata*

Plate 68

Other name: Matata

Size: 18 cm, 35 g

Geographical variation: Five subspecies, each restricted to a single island and its outliers: North Island Fernbird *vealeae*, South Island Fernbird *punctata*, Stewart Island Fernbird *stewartiana*, Codfish Island Fernbird *wilsoni*, and Snares Islands Fernbird *caudata*.

Distribution: New Zealand only. In the North Island, they are widely but patchily distributed north of a line from the Manawatu Estuary to Porangahau, and on Great Barrier and Aldermen Islands. In the South Island, they are common west of the Southern Alps from Farewell Spit and Nelson to the Hollyford Valley, including the Open Bay Islands. They are found along the eastern edge of the Fiordland mountains to Southland and eastward to about Dunedin. Fernbirds are on Stewart Island and many outliers, Codfish Island and on The Snares. Their main habitats are low, dense ground vegetation interspersed with emergent shrubs in swamps, pakahi, rush and tussock-covered frost flats and saltmarsh, low manuka scrub and some young pine plantations, from sea level to c. 1000 m. On The Snares, they are on the forest floor in open *Olearia* and *Senecio* forests. After becoming independent, juveniles roam away from their natal territory and can turn up in small scrub patches and wetlands 20+ km away from the nearest breeding birds.

Population: Widespread and locally common on the mainland, especially in Northland and parts of the Volcanic Plateau, the northern and western South Island, and coastal Southland and Otago. The island populations are moderately abundant, except on Codfish Island. The population on Main Island,

The Snares, was estimated to be c. 1750 pairs in 1972.

Conservation: Protected endemic. The Fernbird declined about the time of European settlement with the loss of much wetland and fernland through agricultural development, the introduction of mammalian predators, and periodic burning of wetland and scrub habitats. Fernbirds disappeared from most of the southern North Island and most of the eastern South Island by the late 1800s. They seem to have stabilised in their current distribution, mainly on poorer land unsuitable for farming, and have colonised some young stands of exotic forest in the central North Island and Hawke's Bay.

Breeding: Most Fernbirds stay in pairs or small groups all year, and many pairs stay in or near their breeding territory. In spring, territorial disputes and call rates increase. Both birds work together to make the nest, which takes about 3 days to build. It is a neatly woven deep cup of dry grass, sedge and rushes, generally lined with feathers. It is usually placed deep in cutty grass, rushes or tussock 15–75 cm above the ground or water level, but occasionally in a small shrub up to 2 m off the ground. On the mainland, Stewart Island and Codfish Island, eggs are laid from late August to January, but on The Snares they are laid from mid-October to late February. Probably two or three clutches are laid each year on the mainland, but on The Snares they normally raise only one brood. Clutch size in the North Island is 2–3–4 eggs (19.5 x 14.5 mm), in the South Island 1–3–5 eggs (20.5 x 15 mm), on Stewart and Codfish Islands 2–3 eggs (22.5 x 15.5 mm), and on The Snares 1–2–3 eggs (23 x 16.5 mm). The

eggs, which are laid daily, are pale pink, heavily flecked with purplish brown, especially towards the large end, but the amount of flecking decreases with successive eggs in a clutch. Both adults incubate for 12–13–15 days on the mainland, but for 15–16–19 days on The Snares. Both parents feed the chicks during a fledging period of 15–17 days on the mainland and 20–21 days on The Snares. Young can breed at 9 months old. The oldest Fernbird recorded in New Zealand lived 6.5 years.

Behaviour: Fernbirds are usually territorial and sedentary, and their flight is weak. Their calls often reveal their presence in a swamp or scrub. They are secretive, but sometimes an inquisitive bird appears out of a tangle of vegetation for a moment or two, and equally quickly disappears. They are reluctant to leave cover, but when forced to, they fly low, with their tail hanging down. Territory defence

breaks down during the autumn moult and in the early winter, but territorial calls increase in early spring. The main calls are a mechanical double call consisting of a low and a sharp metallic note: 'uu-tick', either given by the male alone or in duet with his mate, who responds very rapidly with the 'tick' portion. Other calls include 'tchip', 'tcheong' and 'zrup' notes, and a series of rapid clicks, or 'chittering' and, rarely, a melodic warble.

Feeding: Diet is mainly invertebrates, especially caterpillars, spiders, grubs, beetles, flies and moths. They feed in low vegetation or on the ground. On The Snares, Fernbirds eat maggots and flies around dead penguins, and they often perch on the back of a fur seal or sea lion to catch flies.

Reading: Barlow, M. 1983. *Notornis* 30: 199–216. Best, H.A. 1973. Unpubl MSc thesis, Univ Canterbury. Best, H.A. 1979. *Notornis* 26: 279–287. Best, H.A. 1979. *NZ J Zool* 6: 481–488.