

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.

New Zealand, like many other isolated island groups, has a long history of bird extinction. About 32 species died out in the 800 years between the arrival of Polynesians and the arrival of Europeans, most notably all the moa species. In the 200 years since European contact, 9 further species have become extinct, 5 of which have probably died out since 1900. The main factors that contributed to extinction were loss of habitat, introduced mammalian predators and overharvesting.

**BUSH WREN** *Xenicus longipes*

Probably extinct endemic

9 cm, 16 g. Larger and darker than Rifleman but easily missed in the gloom of the forest. *Head dark olive brown with clear white eyebrow-stripe*; upperparts dark yellowish green, dark green tail; chin greyish white, ash-grey underparts except yellow flanks; long feet and toes. Female and Stewart I subspecies browner. Like the Rock Wren, *bobs on alighting on the ground*. **Habitat:** Forest and scrub. Last records: Urewera, 1955; Nelson Lakes NP, 1968; Kaimohu I (off Stewart I), 1972. [Sp 284]



**NEW ZEALAND WRENS** *Acanthisittidae*

All 4 species; family endemic to New Zealand; 1 (the Stephens Island Wren *Traversia lyalli*) became extinct in 1894, 1 is probably extinct, and 2 remain.

The New Zealand wrens are an ancient family of tiny birds with no close affinity to other groups of birds. They have short, rounded wings and a very short tail. Females are larger than males.

**284. BUSH WREN** *Xenicus longipes*

Plate 74

**Other name:** Matuhi  
**Size:** 9 cm, 16 g  
**Geographical variation:** Three subspecies: the North Island Bush Wren *stokesii* of the North Island, the South Island Bush Wren *longipes* of the South Island, and Stead's Bush Wren *variabilis* of Stewart Island and its outliers.  
**Distribution:** New Zealand only. Subfossil remains are scarce, but Bush Wrens were apparently widely distributed before European settlement. The North Island Bush Wren was probably absent from Northland but otherwise widespread in forests until the late 1800s, though not as common as the Rifleman. In the 1900s, the only authentic records are from the southern Rimutaka Range (1918) and the Urewera Ranges (several records up to a sighting in the Aniwanui Valley in 1955).  
 The South Island Bush Wren was reported as common throughout forested mountain country, especially high-altitude beech forest, from northwestern Nelson and the Richmond Range south on both sides of the Southern Alps to Fiordland. By the early 1900s, they were declining rapidly, and by the 1950s they were recorded only sporadically, and mainly in Fiordland; however, the last two authentic records are from the Little Wainihinihi River, Arthur's Pass (1966), and Moss Pass, Nelson Lakes National Park (1968). Subsequently there have been a few rumours of birds in the Nelson Lakes area and Fiordland.  
 Stead's Bush Wren was common in forest on Stewart Island and in coastal 'muttonbird' scrub of *Olearia* and *Hebe* on several outlying islands. They survived on Stewart Island up to 1951, on Kotiwhenua (Solomon) Island to the early 1960s and on Big South Cape Island to 1965. In 1964, ship rats invaded Big South Cape, and six birds were transferred to Kaimohu Island, where they persisted until the last sighting in 1972.  
**Population:** Probably extinct. Some hope stems from the recent rediscovery of Rifleman in dense forest in Northland, where they were long thought to have been extinct. The most likely places that a few birds could persist are in the Urewera, northwestern Nelson,

Nelson Lakes area, Fiordland or Stewart Island.  
**Conservation:** Protected probably extinct endemic. The Bush Wren declined about the time of European settlement with the loss of much lowland forest, and then disappeared from most of the country in the late 1800s with the arrival of ship rats and mustelids. The extinction of Stead's Bush Wren is directly attributable to the arrival of ship rats at Kotiwhenua and Big South Cape Islands in the early 1960s. The attempt to relocate six birds to a predator-free island failed, probably because of chance events in such a small founder population.  
**Breeding:** The nest was often built low to the ground among the roots of standing or fallen trees, in a low hole or fork of a tree, among clumps of fern or in petrel burrows. It was spherical with a small side entrance near the top; built of moss, fern rootlets and leaves, and lined with feathers. Eggs were found in November–December. They laid 2–3 white eggs (20 x 14.5 mm). Incubation and fledging periods were not known, but both parents incubated and fed nestlings. One bird transferred from Big South Cape to Kaimohu Island was at least 7 years old when last seen.  
**Behaviour:** Pairs were territorial during the breeding season, but at other times of the year single birds, pairs or small family parties were recorded. The common call was a 'subdued trill' or a loud 'seep', sometimes rapidly repeated like the 'whirring' call of the Rock Wren.  
**Feeding:** Diet was almost entirely invertebrates, with moths, flies and spiders recorded being fed to chicks. On the South Island, Bush Wrens fed by running along outer branches of trees, and not close to the trunk like the Rifleman; however, on the 'muttonbird' islands they often fed on or close to the ground, which probably made them especially vulnerable to mammalian predators. They moved swiftly and furtively while searching for prey on branches, among plants on the forest floor or around the bases of trees, with a characteristic hopping or bobbing movement.

**Reading:** Blackburn, A. 1965. *Notornis* 12: 191–207. Creswell, R.A. 1968. *Notornis* 15: 168. Guthrie-Smith, H. 1925. *Bird Life on Island and*

*Shore*. Edinburgh: Blackwood. Stead, E.F. 1936. *Trans Roy Soc NZ* 66: 313–314.