

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.

ROCK WREN *Xenicus gilviventris*

Uncommon endemic

10 cm; ♂ 16 g, ♀ 20 g. Small alpine bird with short tail, rounded wings, long legs and toes, fine black bill, cream eyebrow. Male dull green above, grey-brown below, flanks yellow; brighter green and yellow in Fiordland. Female plainer olive brown. *Bobs vigorously up and down*. Usually hops and runs, flying only short distances. **Habitat:** Alpine regions of South I only, among rockfalls, screes and subalpine scrub. **Breeding:** Oct–Feb. [Sp 285]



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.

285. ROCK WREN *Xenicus gilviventris*

Plate 66

Size: 10 cm; males 16 g, females 20 g

Geographical variation: At one time a subspecies, *rineyi*, was proposed for greener birds found in Fiordland; however, they are now considered to be just a colour phase. Birds in northwestern Nelson are green, those in the central South Island are distinctly browner, whereas those in Westland and Fiordland are again much greener and the sexes are very distinct.

Distribution: South Island only, although subfossil remains have also been found in the North Island. Rock Wrens are patchily distributed in alpine and subalpine habitats of the Tasman Mountains of northwestern Nelson and the Victoria Range of northern Westland, down both sides of the Southern Alps and on some side ranges to the east, to Fiordland. They are apparently sedentary and do not move altitudinally with season.

Population: Widespread and locally common, especially near the Homer Tunnel, near Mt Aspiring and in the Murchison Mountains. They are commonest close to the treeline, especially where screes or rockfalls are interspersed with stable areas of low scrub, fellfield and cushion vegetation.

Conservation: Protected endemic. Rock Wrens disappeared from the North Island before European settlement, but in the South Island their range has changed little since European settlement; however, the distribution has become patchy and numbers have probably declined in some areas. Fires and introduced mammalian predators, especially stoats and mice, are major reasons for their decline. Being a high-altitude species, they are susceptible to long-term climate changes affecting their habitat, overwinter survival and timing of breeding.

Breeding: Contrary to popular speculation, pairs remain on their territory all year and do not migrate to low altitudes in winter. The

female selects the nest site, but both birds work together to excavate a hollow in a bank or rocky crevice, or use a soil-covered ledge for the nest. The large enclosed nest has an entrance tunnel in the side. It is made of tussocks, grasses and sedges, and is lined with feathers. During the week of nest-building and the next 5 days before eggs are laid, the female is frequently fed by the male. Most first clutches are laid from mid-October to mid-November, but replacement clutches are laid until late December. They lay 1–3–5 creamy eggs (20 x 15.5 mm, 2.5 g). Both sexes incubate equally for 18–20–22 days. The chicks, which hatch over 1–3 days, are brooded throughout the fledging period of 21–24–26 days. Towards fledging, they are only brooded about 40% of daylight hours by both parents, but all night by the female. Both parents feed the chicks until they disperse 2–4 weeks after fledging. Many juveniles form pairs in the summer they are hatched and then breed when 11 months old. The oldest bird recorded lived at least 8 years. **Behaviour:** Pairs remain on territory all year and, unlike the Rifleman, there is no indication that they have helpers at their nests. They have quite weak flight and bob their body on alighting. A conspicuous display involves bobbing and wing flicking. The main calls are a high-pitched and far-carrying three-note call, with the first note being accentuated, and a 'whirring' call. Pairs sometimes duet. **Feeding:** Diet is mainly invertebrates, especially beetles, spiders, centipedes, caterpillars, flies and larvae of moths and caddisflies, but *Coprosma* and *Gaultheria* fruit and grass seeds are also eaten.

Reading: Heath, S. 1986. In *Flora & Fauna of Alpine Australasia*. Melbourne: CSIRO. Michelsen Heath, S. 1989. MSc thesis, Univ Otago. Soper, M.F. 1961. *Notornis* 9: 158–161.