

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.

PIOPIO *Turnagra capensis*

Probably extinct endemic

26 cm. Plump olive-brown Blackbird-sized forest bird. Upperparts olive brown; upper tail coverts and tail rust red, except olive-brown central tail feathers; short robust dark brown bill; legs dark brown. North I subspecies had *white throat*; olive-grey breast and belly, the under tail coverts washed yellow. South I subspecies was *boldly streaked brown and white below*, throat and sides of neck tinged reddish brown, and feathers of forehead, crown and face tipped rust red. Song varied and sustained with 5 distinct bars, each repeated 6–7 times. Common call a short, sharp, whistling cry, quickly repeated. **Habitat:** Native forest and scrub; last confirmed record King Country, 1902, but more recent reports from inland Taranaki, Urewera, western Nelson and Fiordland. [Sp 327]



BIRDS-OF-PARADISE, BOWERBIRDS and PIOPIO Paradisaeidae

62 species in Australasia; 1 endemic species is probably extinct.

Until recently, Piopio were considered part of an endemic family (Turnagridae), but now they are treated as part of the birds-of-paradise and

bowerbird assemblage, perhaps most closely related to the catbirds (a bowerbird) of eastern Australia. These medium-to-large forest birds are renowned for their often bright plumages and/or complex displays, and many varied calls. They eat mainly fruit and insects.

327. PIOPIO *Turnagra capensis*

Plate 74

Other name: New Zealand Thrush

Size: 26 cm

Geographical variation: Two subspecies: the North Island Piopio *tanagra* of the North Island, and the South Island Piopio *capensis* of the South Island, Stephens Island and probably Stewart Island.

Distribution: Probably extinct. Subfossil and midden records are widely distributed from Northland to Stewart Island. Piopio were widespread in forest at the time of European settlement, especially in the southern North Island and most of the South Island, also Stephens Island. In some districts, they were at first common but had all but disappeared by 1900. The last confirmed specimen in the North Island was shot at Ohura, southern King Country, in 1902. Reports of sightings, mainly in the Urewera Ranges and inland Wanganui/Taranaki up to the 1950s, could not be confirmed. Few birds were seen in the South Island after the 1880s, but unconfirmed sight records persisted in western Nelson and Fiordland to 1963.

Likely causes of extinction: The Piopio's rapid decline suggests introduced predators

or avian disease as possible causes, because much forest habitat remained. The spread of introduced mammals, particularly cats, Norway rats, ship rats and mustelids, probably contributed significantly to their demise.

Breeding: The nest was a cup built of twigs and moss, lined with grasses, tree-fern scales or other fine material, in a tree fork usually c. 2 m high. The usual clutch was 2 white or pinkish-white eggs (35 x 25 mm) with scattered black or brown spots.

Behaviour: Piopio lived in forest and scrub from the coast to the mountains. They were very tame and readily came around people camping, where they were easily killed by dogs; Sir James Hector on one occasion counted 40 by his camp on the West Coast. They had a variety of song and calls.

Feeding: Diet included invertebrates, often from the forest floor, plus fruits, seeds and foliage.

Reading: Mead, W.P. 1950. *Notornis* 4: 3–6. Medway, D.G. 1968. *Notornis* 15: 177–192. Olson, S.L. et al. 1983. *Notornis* 30: 319–336.