

North Island Fernbird: Moulting and morphometrics

This project aims to describe the moulting and morphometrics of the North Island Mātāmātā Fernbird *Poodytes punctatus vealeae* (At Risk/ Declining). The sequence, timing and extent of post-juvenile and post-/pre-breeding moulting is not well documented and will be the main research objective for this study. Knowledge about the South Island Fernbird moulting by the Nelson Birds NZ Fernbird study will be shared with North Island Birds NZ banders to support population monitoring at several banding sites in the Whangarei region, currently managed for conservation. The first year of the BNZRF North Island project was successful with 46 Fernbirds banded over two visits in November 2023 and April 2024. This study will build on the sample size and continue to assess moulting and develop criteria for ageing and sexing Fernbirds.

This endemic threatened sub-species is of particular interest for conservation management as it is vulnerable to habitat loss, disturbance, and predation. An understanding of the timing and extent of moulting is fundamental to determining the age of Fernbirds and moulting characteristics can be used for conservation management to assess body condition and inform age and sex ratios of discrete bird populations. The Fernbird occurs across a wide latitudinal and altitudinal range and therefore is also a candidate to study the influence of climate on demographics, the timing of moulting, breeding and response to environmental factors such as food supply.

Dr Paul Fisher, Nelson Birds NZ



CP17586 juvenile female, completing partial post-juvenile eccentric moult.