

THE CAPACITY OF RESTORED URBAN FORESTS TO SUPPORT NATIVE BIRDS

Elizabeth Elliot Noe



Photo by Claire-Louise Coates.

My doctoral research at the University of Waikato investigated the benefits of urban forest restoration for city residents and native birds. Recognizing that cities represent complex, interconnected networks of human actions and their effect on ecosystems and organisms, my thesis integrates the social and natural sciences in a multidisciplinary framework, with the overarching aim of investigating the capacity of urban forest restoration to break the vicious cycle of the extinction of nature experience by provid-

ing habitat for native forest birds and reconnecting urban residents with nature in New Zealand cities.

Using interviews, I explored Hamilton residents' experiences of urban nature in frequently used parks and gardens. This research identified a gap between what residents claim to value and their concrete actions affecting native biodiversity. For example, people claimed to prefer native plants, but gardens were dominated by introduced species, or people valued native birds but did

not design gardens to benefit them, or protect them from pet cats. Given this value-action gap, this study suggests we cannot currently rely on private gardens to provide adequate resources for native birds and highlights the need for ecological restoration of public greenspaces.

To evaluate the success of urban forest restoration and determine how native forest bird communities changed over time, I monitored birds and mammals at 43 sites in Hamilton, the Hakarimata



Grey warbler nest with chicks in restored urban forest.

Ranges, New Plymouth and the Kaitake Ranges. The results demonstrated that urban forest restoration increases native bird species richness and diversity over time, and transforms the bird community from one dominated by introduced granivores and generalists, to one dominated by native forest birds. This research highlights that provision of habitat through restoration is the necessary first step in re-establishing native forest bird communities in New Zealand cities. I am grateful for the generous support of Birds New Zealand through the 2019 David Medway Scholarship.