

Monitoring birds at Rewanui

At Rewanui, our long-term aim is to restore the native habitat so that a wide range of native species thrive there. Native birds are a key component of a healthy native habitat, and are also the one type of wildlife people most enjoy having on their property.

In 2008, we began a three-year programme to monitor birds, invertebrates, reptiles, and vegetation at Rewanui. A specialist from the Greater Wellington Regional Council biodiversity team was contracted to do the monitoring. Our aim was to get an idea of the relative abundance of native wildlife in different types of habitat at Rewanui. From this initial baseline data, future changes in wildlife populations can be gauged.

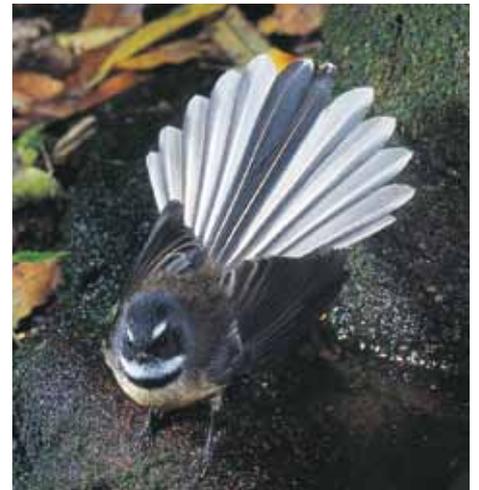
Over the same three years 2008-2011, we also intensified pest animal control at Rewanui, which began in 2006. By monitoring native wildlife simultaneously, we hoped to find out how native species responded to pest control carried out over the entire property.



Silvereye



Tui



Fantail

Monitoring birds using five-minute counts

We began our bird surveys in February 2009. We set up 27 survey stations on transects across the property, with nine stations in each of the three main habitat types at Rewanui: (i) native bush (ii) non-native vegetation, e.g., hill grazing or plantation trees, and (iii) mixed native/non-native vegetation. Each station was at least 200 metres from any other to avoid overlap.

The contractor visited each station three times over a one-week period, on calm, fine mornings. She noted all native and non-native bird calls and sightings within 50 metres of the station over a five-minute period. As she walked between stations, our contractor also noted sightings or calls.

The survey was repeated in 2010 and 2011, at the same time of year.

What species did we find at Rewanui?

After three years, we had recorded a total of eleven native, and sixteen non-native species at Rewanui.

Native species

Silvereye (waxeye), tui, fantail, grey warbler, bellbird, wood pigeon (kereru), shining cuckoo, kingfisher, pipit, harrier, morepork.

Non-native (exotic) species

Blackbird, chaffinch, goldfinch, greenfinch, hedge sparrow, house sparrow, magpie, plover, quail, redpoll, rock pigeon, rosella, starling, swallow, thrush, yellowhammer.



Kingfisher



Bellbird



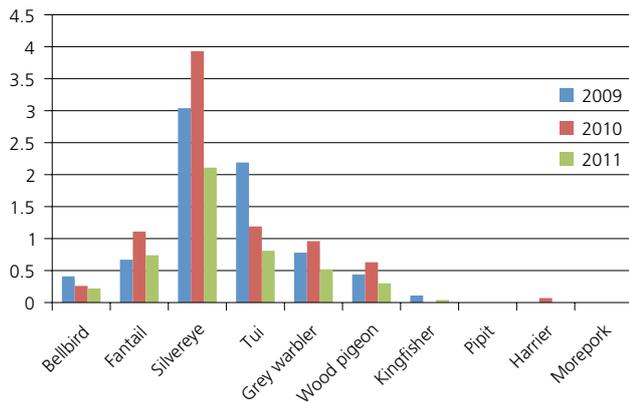
Morepork



Grey warbler

Silvereys were the most numerous native birds across all three habitat types each year; tuis, fantails and warblers the next most common. Harrier, kingfisher, pipits, and morepork were observed outside the native bush areas. These four species prefer more open habitat, and are not such good indicators of the health of the native bush. Shining cuckoos are migratory native birds and therefore their presence is less reliable in bird monitoring.

Native bird counts, Rewanui, 2009–2011



Numbers of all species fluctuated over the three-year monitoring period, and there was no distinct trend in populations overall. Bird populations need more than two or three years of monitoring to establish any recovery following pest control. Also, bird populations fluctuate naturally so long-term monitoring is needed to detect any significant population changes over and above natural changes.

Bellbirds, fantails, silvereys, tui, grey warblers and woodpigeons will be the species we focus on in future monitoring, as they are good indicators of healthy native bush. If, after a number of years, populations of these species still fail to increase, we may consider more intensive pest control, especially within the native bush areas.

Monitoring birds on your own property

Anyone with a reasonable knowledge of what birds look and sound like can carry out five-minute bird counts. Spending time in the bush with patience and binoculars is the best way to learn. We advise you to plan a systematic survey, going back to the same places at the same time of year, so you can compare 'before and 'after' results.

For further advice, and on-site assistance, contact:

1. Your regional council biosecurity team
2. Private specialist contractors.

More information

1. Pest control and monitoring native wildlife at Rewanui

See other Information Notes in this series.

2. About the work at Rewanui

Montfort Trimble Foundation:
www.trimblefoundation.org.nz

TTree species trials: Stuart Orme, Woodnet
stuart@woodnet.co.nz

Acknowledgements

MAF's Sustainable Farming Fund supported our trials and monitoring from 2008–2011.

Nyree Fea was responsible for wildlife monitoring at Rewanui from 2008–2011.

Rewanui belongs to the Montfort Trimble Foundation, a trust dedicated to growing trees for the benefit of local people. The farm is being developed as a trial and demonstration property. Our focus is on new approaches to adding trees to the farming mix.

Photos: Courtesy Nga Manu Images

