

Response of native bird populations to intensive pest control in Wellington's Wainuiomata Mainland Island

Dr Philippa Crisp¹, Nikki McArthur²

¹Greater Wellington Regional Council, ²Wildlife Management International Ltd

Reducing introduced mammalian predators to low densities is commonly carried out in New Zealand to improve the viability of native bird populations. Despite this, there are still relatively few published studies that have demonstrated that mammalian pest control has resulted in improvements in native bird densities. Here we present an example of a before-after, control-impact study of the effect of intensive mammalian pest control on native bird densities in the Wainuiomata Water Collection Area, near Wellington. Greater Wellington Regional Council has been carrying out intensive, ground-based multi-species pest control in 1300 ha of the Wainuiomata Water Collection Area since 2005. During this time, five-minute bird counts have been carried out within this treatment area, and in an adjacent 800 ha non-treatment area. By 2015, mean counts of several native forest bird species had increased significantly over time, and were significantly higher than in the adjacent non-treatment area. These results suggest that bird populations in the Wainuiomata Water Collection Area have increased in density as an outcome of the intensive, ground-based pest control occurring in the treatment area. We recommend that conservation practitioners wishing to measure the outcomes of mammalian pest control for native birds always include a 'non-treatment' area into their monitoring design, whenever site geography and project resources permit.