

Survey of Raukawa geckos (*Woodworthia maculata*) on Tiritiri Matangi Island, December 2015



This survey was carried out under Authority 39910-Res, granted to the Supporters of Tiritiri Matangi (Inc.) (SoTM) by the Department of Conservation (DOC) in December 2014. It permits non-invasive research and monitoring of flora and fauna on the Island.

For reasons of sensitivity, given the vulnerability of New Zealand reptiles to capture for sale, it is possible to release publicly only a brief summary of the survey.

Summary

Raukawa Geckos (*Woodworthia maculata*) were first discovered on Tiritiri Matangi in July 2004. Since their discovery there had been two surveys conducted in 2006 and 2007-08. These surveys found that *W. maculata* were present in an area on the island's east coast ranging from the southern end of Pohutukawa Cove to northern Fisherman's Bay, with geckos only being found near the cliff edges in close proximity to the coast.

As it had been eight years since the population had been monitored, it was decided to conduct a further survey in the summer of 2015-16. Nick Harker, assisted by his brother Tim Harker, carried out the survey under a summer studentship provided by SoTM. The purpose of the survey was to follow up on the previous survey work and assess both the population numbers and spread of *W. maculata* on the Island's east coast.

A combination of survey methods were used which included; baited tracking tunnels, onduline ACOs (Artificial Cover Objects), and visual searches conducted at night. The results from this survey indicate that *W. maculata* are doing well on Tiritiri Matangi. Geckos were recorded in larger numbers than in previous surveys, were recorded further inland from the coast, and were found in new areas from which they had not previously been reported. As expected from previous survey work, the majority of observations were concentrated in the middle of the Island's east coast in an area ranging from the Arches to Saddleback Bay. However, the current known range of *W. maculata* on Tiritiri Matangi has now been extended to include an area just north of Chinaman's Bay; a range increase of over 800m south. Given the new records from previously surveyed locations, it is possible that the population range extends further south than the area covered during this survey, possibly onto the Island's west coast.