



Assessing ecosystem resilience after large scale predator control

It's widely accepted that predator control is a “good thing” but exactly how effective is it? Do some methods work better than others? Are some environments more suited to control than others? New Zealand has been keeping records of predator numbers for many years and a thorough analysis of these data will lead to some exciting results.

Unfortunately, the data is stored across multiple sites, in assorted formats. It is often patchy with missing years and was usually intended for purposes other than this. Dealing with large datasets of this type is becoming more and more common in ecological research and overcoming the problems associated with these datasets is the subject of ongoing research.

This project is part of a wider research effort with a postdoctoral fellow at Landcare Research to collate, analyse and model the available data in New Zealand. Depending on the strengths of the student they could undertake large scale statistical analysis across many geographic sites or focus on a number of smaller case studies, e.g. Greater Mercury Island. They would also use mathematical modelling techniques to predict the effects of control under different conditions.

The student will be enrolled at the University of Canterbury and will work under the supervision of Ass. Prof. Alex James. The student will be co-supervised by Dr Andrea Byrom of Landcare Research. They will also spend time at Landcare research as part of their studies.

Applicants for this scholarship should hold an Honours or Masters level qualification in mathematics, statistics or a related discipline and have a strong interest in ecology.

The scholarship is tenable for three years and will pay for tuition fees (for a domestic or international student) and a stipend of \$x per annum.