Purpose:
The purpose of these scholarships is to support a new ecological research programme focused on the Taranaki region. The Integrated Taranaki Ecosystem Model (ITEM) research programme will include research on coastal and marine, freshwater and terrestrial ecosystems from the mountain to the sea. The research team includes Professor Bruce Clarkson, Professor Brendan Hicks, Professor Chris Battershill from the University of Waikato and Dr Beverley Clarkson from Landcare Research providing expertise and supervision for the full range of ecosystems to be covered.

All of the research will have a strong component of field ecology as well as laboratory studies. The focus for the research will be on understanding the pattern, process and functioning of Taranaki’s present-day ecosystems in order to understand the nature and extent of change and what might be needed to maintain and conserve their original character.

For further information read the full Integrated Taranaki Ecosystem Model (ITEM) research programme.

Eligibility criteria:
To be eligible, applicants must be intending to enrol fulltime in:
   a) a 120-pt Masters thesis; or
   b) a Doctoral degree at the University of Waikato. All applicants must apply to enrol in a PhD to be admitted to the Doctoral Programme. Applications are considered in three rounds a year: 31 January, 31 May and 30 September.

Commencement date:   A semester 2020

Value:         Masters Level:   $15,000 (of which $5,500 will be applied directly to the tuition fees for the masters thesis paper)

PhD Level:    $25,000 per year for three years + $5,000 towards domestic tuition fees for each year of PhD enrolment.

Application documents required:
   • A cover letter outlining your interest in one or more of the proposed research topics listed below
   • A CV (maximum four A4 pages in length)
   • Academic transcripts from previous study undertaken

Selection Process
All ‘Expressions of Interest’ will be considered and shortlisted candidates will be invited to discuss their chosen area of research interest further with a selection panel.

Research Topics:
The topics listed below are divided into four areas of research. When completing your Expression of Interest, please list research topic/s in order of preference.

Taranaki Terrestrial Restoration Ecology
   1. The role of Coriaria spp. in the development of Chionochloa rubra tussock herbfields on Mount Taranaki
   2. The role of Coriaria arborea in forest succession of the upper Hangatahua catchment, Mt Taranaki
   3. Nutrient relationships in modified and intact wetlands of the Taranaki ringplain.
   4. Priority effects in the subalpine and alpine herbfields of the Pouakai Range and Mount Taranaki
   5. Invasion ecology of ferrets and stoats on Taranaki Mounga
Taranaki Freshwater/Lake Environments

6. Remote sensing of algae in Taranaki’s fresh waters
7. Tracing marine migrations in Taranaki’s freshwater fish through otolith microchemistry
8. Restoration of fish populations in Lake Rotorangi and its tributaries
9. Restoration of the natural ecosystem of Lake Rotokare
10. Source to the sea: nutrient linkages between the freshwater and marine environments in Taranaki

Taranaki Coastal and Marine Environments

11. The fate and effects of terrestrial sediments on Taranaki’s coastal reefs - why so many sponges, what is their role, and are they under threat?
12. The biodiversity of Taranaki marine life, a unique assemblage: I. Porifera
13. The importance of land sea connectivity to highly productive Taranaki reef systems
14. Source to the sea: nutrient linkages between the freshwater and marine environments in Taranaki

Taranaki Conservation and Restoration Ecology

1. Consideration will also be given to proposed research topics that are relevant to conservation and restoration ecology in Taranaki. Please outline details of your proposed topic in your cover letter. The project details should be no more than one A4 page.