

MSc & PhD Opportunities: University of Canterbury

Native Insect Conservation & Biodiversity

Interested in MSc or PhD research in the field of entomology? Several funded and un-funded (but awesome!) projects are now available in the Murray lab at Canterbury University.

Terrestrial insects are seriously under-represented in New Zealand conservation efforts despite being seriously under threat from the same drivers pushing other endemic animals and plants towards extinction (land use change, invasive weeds, introduced herbivores and predators, climate change). Basic ecological and behavioural knowledge is often limited for endemic threatened insects and many of the tools regularly used in the management of iconic endangered vertebrates have not been adequately adapted and applied to insects.

Students interested in changing this to preserve and understand New Zealand's unique endemic insect fauna are invited to apply to undertake postgraduate research at the University of Canterbury and work at the forefront of insect conservation. I'm seeking highly motivated, field-competent students with excellent academic skills to work on a variety of projects focused on threatened insect conservation, particularly in the dryland, alpine and coastal ecosystems of the South Island. Species I'm currently interested in supervising projects on include Canterbury knobbed weevil, robust grasshopper, Foveaux looper, forest ringlet, flightless alpine moths, terrestrial invertebrates of braided river systems. Research areas include;

- Monitoring techniques to assess population trends & impacts of conservation & restoration actions
- Developing *in-situ* & captive rearing protocols
- Ecology, behaviour, interactions with host plants and enemies
- Threats & threat mitigation
- Assessment of translocation options to disperse risk

Interested students should contact Dr Tara Murray at tara.murray@canterbury.ac.nz. Ideal candidates will have an undergraduate GPA of 7.0 (A- average or higher), a driver's license, be super keen on the outdoors and willing to undertake fieldwork, and meet UC entry requirements.

For information about enrolment at UC visit:

<http://www.canterbury.ac.nz/future-students/apply-and-enrol/>

Canterbury Knobbed Weevil: Re-discovered in 2004 after 80 years, this *Aciphylla* weevil is arguably the most critically endangered insects in NZ. PhD project available now with part funding from the Endangered Species Foundation.



Robust Grasshopper: Better described as a 'gravel hopper' this nationally endangered species is found only on MacKenzie Basin riverbeds. Funded MSc & PhD projects available now.



Photo: Brigit E Rhode
Flightless moths are poorly studied & at particular risk from the effects of climate change both directly & via impacts on their host plants. Projects on alpine and coastal species available now.