

## Effects of Isolation on Pollinators

**Date:** Tuesday 25 November 2014  
**Time:** 3:00 p.m. to 4:00 p.m.  
**Location:** Room 208, Level 2, Te Ao Marama Building, UC Campus

Christie has completed a Bachelor of Science in Biological Sciences with an endorsement in Ecology and is currently studying towards a Master of Science in Ecology. Her studies combine empirical and theoretical approaches to study spatial associations among pollinator networks.

### Abstract:

Pollination by insects is an important ecosystem service on a global scale, both for maintaining biodiversity and for human well-being through food production. In order to predict what will happen to mutualistic interactions, such as pollination, in the face of global-change recent community- and metacommunity-level studies have been investigating plant-animal interaction networks. My research has followed a similar approach by combining empirical data and network analyses to study the effects of isolation on the metacommunity structure of mutualistic interaction networks.

A manipulative field experiment with plant patches at varying degrees of isolation was set up on a farm in Oxford, New Zealand. Observations were conducted over a three-month period where all flower visiting insects were collected to be identified and to have their pollen load measured. Each plant's seed-set was also measured to quantify pollination success at patches. This data was used to investigate the effects of isolation on mutualistic interaction networks. I will present results and implications of this research.