

Rachel Fewster's profile, July 2008

Member since: 2006

Current work position: Senior Lecturer in Statistics

Employer: University of Auckland, NZ



Describe one of your current work projects:

New Zealand has no native land mammals, and native birds are at constant threat from introduced predators such as rats, cats, and stoats. Rats are among the worst: they can live almost anywhere, and cause serious habitat damage and food scarcity, as well as being nest-robbers. Several species of birds are now confined to offshore islands, which can be kept rat-free. Unfortunately, rats are excellent swimmers, and are also adept at stowing away in boats. We have been using statistical population genetics to investigate where island rat populations have come from, and the levels of ongoing migration among islands. With a better understanding of the movements of rats, and possible obstacles such as island cliffs, we can better target conservation efforts to islands that have a chance of remaining free of rats in the long term.

What do you like about your work?

- ❖ Variety in research projects, ranging from theoretical work developing new estimators or analysis approaches, to hands-on work in practical conservation projects involving daily contact with conservation workers and the public.
- ❖ Reward of doing something lasting and worthwhile.
- ❖ Balance between research and teaching in the university setting. Teaching brings people-contact, and is great for clarifying your understanding of the subject and ensuring you remain a lifelong learner. Research is a roller-coaster ride of thrills and spills – it can be highly addictive!
- ❖ Constant stimulation, endless opportunity for creative thinking.

Qualifications

1995	BA Mathematics (Hons I)	University of Cambridge, UK
1999	PhD (Statistics)	University of St Andrews, UK

Any advice for prospective “biometricians”?

- ❖ For applied work, getting involved with the practical data collection is a very good investment and use of your time.
- ❖ Reading academic papers can be hard work, especially at first. Find some way of enjoying it – over coffee in your favourite café, by the sea, or in your preferred bush retreat – and do as much of it as you can!

Link to a relevant website

www.stat.auckland.ac.nz/~fewster/