Ewen lab hihi research update

June 2014

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ACCEPTED PAPERS, MEDIA & OUTREACH

- No new hihi papers this month but one interesting one on reintroduction…
  Ewen, J.G., Soorae, P.S. & Canessa, S. (2014) Reintroduction objectives, decisions and outcomes: global perspectives from the herpetofauna. Animal Conservation (in press)

PRESENTATIONS, VISITS & NEWS *conference presentations, visits to and from group members etc*

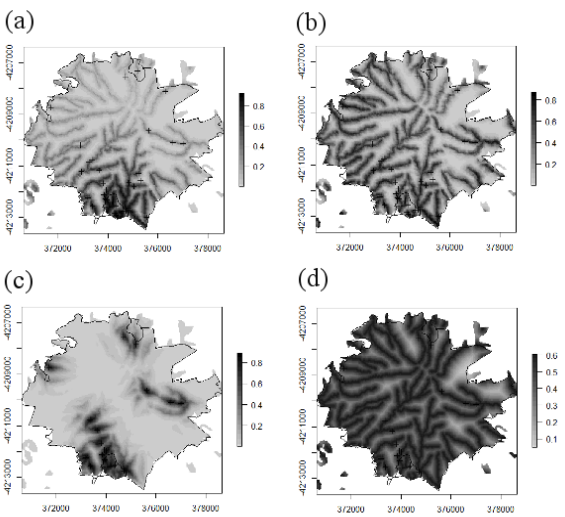
- **Anna Santure, John** and **Patricia** submitted their full Marsden grant application for genomics work on hihi.
- **John** gave a seminar to the Mauritian Wildlife Foundation and is visiting and developing projects.
- **Ali** has all her travel visa's and is getting ready to move down to Queensland and her new post-doc position.

FEATURE STORY: Abstract from Kate's latest PHD chapter/manuscript.

Habitat selection in a reintroduced population: variation between natal and post-release dispersal

The importance of understanding dispersal behaviour in reintroduction biology is well recognised, with post-release habitat selection an important component of dispersal. Understanding the factors driving habitat selection in reintroduced populations can be critical to reintroduction success. Social factors in particular can influence habitat selection, such as through conspecific attraction, and this can have both positive and negative effects on reintroduction success, particularly where multiple releases occur. In addition, little is known about whether habitat selection differs between natal and post-release dispersal, even when comparisons are made only with dispersal aged juveniles. Often it is assumed that information on natal dispersal can act as a guide for predicting post-release dispersal, but no studies to date have examined this.

We examine the factors influencing both natal and post-release dispersal in juveniles of a reintroduced hihi population. We demonstrate a strong effect of conspecific attraction in habitat selection of natal dispersers bred at the site (largely the offspring of founders), but find no effect of conspecific attraction in habitat selection of juveniles translocated two years after the first releases occurred. We suggest 1) that consideration of conspecific attraction should play a role in planning reintroduction release strategies, especially if follow-up releases are considered necessary, and 2) that it may not be appropriate to assume post-release dispersal will be driven by the same factors that influence natal dispersal.



Predictive maps from maximum entropy species distribution models, predicting probability of occurrence of hihi territory occurrence at Maungatautari based on environmental and social variables, for (a) preliminary analysis assessing effect of environmental variables on probability of occurrence (including release site as a variable). Cross shows location of all hihi territories 2010-13 (n=34), (b) preliminary analysis assessing effect of environmental variables on probability of occurrence (excluding release site as a variable). Cross shows location of all hihi territories 2010-13 (n=34), (c) resident first year hihi 2011/12, assessing effect of environmental and social variables on probability of occurrence. Cross shows location of these territories only, (d) recently translocated first year hihi 2011/12, assessing effect of environmental and social variables on probability of occurrence. Cross shows location of these territories only. Outlined area shows predator-exclusion fence.

FUNDING *our major funders and new funding news*

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CURRENT AND PAST FUNDING – thank you!

+ British Research Council **+** Royal Society **+** Leverhulme Trust **+** Department of Conservation **+** AXA-fund **+** NERC **+** SoTM **+** ASAB **+** Massey University **+** NZ Safety Ltd.

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