

Ewen lab hihi research update

January 2012 - Happy New Year!



ACCEPTED PAPERS, MEDIA & OUTREACH

• **Ali has a hihi paper accepted. Congratulations!!**

Does supplemental feeding affect the viability of translocated populations? The example of the hihi. Aliénor L. M. Chauvenet, John G. Ewen, Doug P. Armstrong, Tim Coulson, Tim M. Blackburn, Lynn Adams, Leila K. Walker & Nathalie Pettorelli. *in press Animal Conservation.*

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

- **Patricia** gave a plenary talk at the EGI conference in Oxford entitled 'The role of genetics in reintroduction' and also gave a talk on the hihi project to A-Level students (school) as part of the Edexcel A-level days.
- **Michelle** has been involved in sampling hihi for salmonella on Tiritiri Matangi Island.
- **John** has visited the NZCCM at Auckland Zoo to discuss the developing salmonella research and monitoring on Tiritiri Matangi.
- **Kate, Lydia** and **Scott** are busy chasing down juvenile hihi at Maungatautari
- **Rebecca Moyle** has completed her research project for her post-graduate diploma in wildlife management at the University of Otago. Rebecca worked with **Michelle** on Tiritiri Matangi before undertaking her distance sampling project at Maungatautari working with **Kate** and with some guidance from **John** and **Kevin**.
- **Jessica van der Wal** will be arriving in New Zealand shortly to study social structure in hihi creches. She is working through Wageningen University (Netherlands) and in collaboration with Rose Thorogood. She will spend time observing hihi on Tiritiri Matangi and helping **Michelle** finish the season then go to Bushy Park to work with **Kate** and **Lydia**.

FEATURE STORY: **Ali and co-authors abstract from their recently accepted paper!**

Translocations are commonly-used conservation actions that aim at establishing new, self-sustaining populations of threatened species. However, many translocated populations are not self-sustaining but managed through supplemental feeding from the onset. Often the decision to start managing is ad hoc, but managers will eventually have to make decisions for the future, e.g., stop intervening, continue as it is or change the quantity of food provided. Such a decision requires managers to quantify the importance of supplemental feeding in determining the performance and population dynamics of translocated populations, information that is rarely available in the published literature. Using the hihi as a case study, we examined the importance of supplemental feeding for the viability of a translocated population in New Zealand. We found that supplemental feeding positively affected the survival and abundance of translocated adult hihi but also found evidence of negative density-dependence on recruitment. We present two stochastic population models which project the hihi population under different management scenarios, quantitatively assessing the impact supplemental feeding has had on the population. Our results illustrate how important long-term targeted monitoring is for robust decision-making about adaptive management.



Kapiti island: the hihi population studied in this paper. Photos: J.Ewen

FUNDING our major funders and new funding news

CURRENT AND PAST FUNDING – thank you!

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