

Ewen lab hihi research update

October 2011



ACCEPTED PAPERS, MEDIA & OUTREACH

• **Vote for hihi as bird of the year! We have had a great response and were sitting 3rd yesterday. Follow the link to help get hihi into the spotlight**
<http://www.birdoftheyear.org.nz/>



• Hihi hit the radio waves in Switzerland (in Italian) – if you are brave go to the podcast and start at 17:44 minutes <http://podcast.rsi.ch/ReteTre/Baobab/SPECIALE42-25.10.11.mp3>

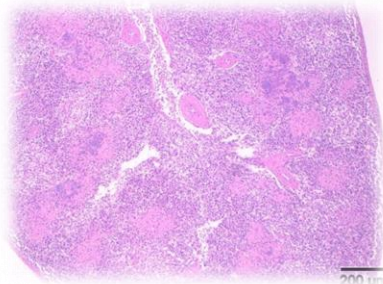
PRESENTATIONS, VISITS & NEWS *conference presentations, visits to and from group members etc*

- **Patricia** is visiting Eric Postma at the University of Zurich, Switzerland to work on animal models in hihi. Patricia also gave a departmental seminar of her hihi research.
- **Leila** finished her field sampling on Tiritiri, spent a week at Maungatautari, and has now returned to the UK.
- **Ali** resubmitted a corrected manuscript – “Chauvenet, A.L.M., Ewen, J.G., Armstrong, D.P., Coulson, T., Blackburn, T.M., Adams, L., Walker, L.K., Pettorelli, N. Does supplemental feeding affect the viability of translocated populations? The example of the hihi.”
- **Kate** is in the field at Maungatautari and succeeding in finding lots of hihi (with great help from **Lydia**).
- **Michelle** has settled into Tiritiri Matangi and is getting ready for the first nestling banding due in a few days time.
- Marcus Rowcliffe and **John** have set an MSc assignment asking Imperial College students to develop a monitoring framework for Maungatautari hihi – designed for use by volunteers.

FEATURE STORY: **Update on salmonellosis in hihi on Tiritiri Matangi.**

Zoonotic disease, salmonellosis and the hihi

On the 30th September this year, an adult hihi was found dead in a nest box in Wattle Valley on Tiritiri Matangi. This bird had previously been looking unwell at the Wattle Valley feeding station on the 27th September. The body was sent to Massey University for necropsy. This hihi died from salmonellosis caused by *Salmonella* serotype Saintpaul. *Salmonella* can be a highly infectious pathogen and had previously caused disease in the hihi population on Tiritiri Matangi. In February 2006 about 26% of the adult hihi population (population estimated at 170 adults in September 2005) died as a result of salmonellosis, caused by another strain, *Salmonella enterica* serotype Typhimurium DT195. No cases of any *Salmonella* sp. infection have been reported between these events in this population.



a histological section of the spleen of an affected hihi showing an acute multifocal inflammatory necrosis associated with numerous colonies of bacteria, haematoxylin and eosin stained

Throughout October 2011 the ongoing monitoring effort was increased, with close attention being paid to any sick looking or fresh dead animals (not just hihi). Two dead bellbirds, a masked lapwing, a pukeko and a tuatara were found in subsequent weeks and sent for necropsy. The lapwing and tuatara were also diagnosed with salmonellosis. We are now waiting to see if it is the same or different strains.

According to Maurice Alley of Massey University, *S. Saintpaul* is more often seen in wild reptiles and only occasionally in wild birds. However, *S. Saintpaul* is relatively common in people with one or two cases per month in New Zealand throughout 2011.

FUNDING *our major funders and new funding news*

CURRENT AND PAST FUNDING – thank you!

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

STAFF AND STUDENT CONTACTS

Permanent Staff

- Professor Doug Armstrong (Massey University, New Zealand D.P.Armstrong@massey.ac.nz)
- Dr John Ewen (Institute of Zoology, United Kingdom john.ewen@ioz.ac.uk)
- Dr Phillip Cassey (University of Adelaide, Australia phill.cassey@adelaide.edu.au)
- Dr Rebecca Kilner (University of Cambridge, United Kingdom rmk1002@hermes.cam.ac.uk)

Post doctoral Research Staff

- Dr Patricia Brekke (Institute of Zoology, United Kingdom patricia.brekke@ioz.ac.uk)
- Dr Nathalie Pettorelli (Institute of Zoology, United Kingdom nathalie.pettorelli@ioz.ac.uk)
- Dr Rose Thorogood (University of Cambridge, United Kingdom rose.thorogood@gmail.com)
- Dr Kevin Parker (Massey University, New Zealand k.parker@massey.ac.nz)

PhD Students

- Leila Walker (University of Cambridge, United Kingdom lkw24@hermes.cam.ac.uk)
- Aliénor Chauvenet (Institute of Zoology, United Kingdom Alienor.Chaouvenet@ioz.ac.uk)
- Kate Richardson (Massey University, New Zealand k.richardson@massey.ac.nz)

