#### WINDY HILL ROSALIE BAY CATCHMENT TRUST



Newsletter #19

**June 2011** 

Kia Ora

What a difference the La Nina weather pattern has created in our Sanctuary this summer and autumn. The wetter warmer conditions have fostered huge native seed abundance which is available, because the rats are at such low densities, to support bird life to an extent that I have not experienced in the seventeen years since I moved to live on the Barrier. Other people are also noticing the birds - a recent comment from a long term Barrier resident working in the Sanctuary to fix a phone line – "I haven't heard this many birds on Barrier since I was a child" and another visitor commented "this is like being at Tiri". For our field team, Kevin Parsons (started April 2002), Rachel Wakefield (started February 2005), Mick Butterworth (in his 3<sup>rd</sup> year) and volunteers Dave Harland and Brandon Kerr, working to abundant bird song is cause for celebration after so many years of concerted effort.

In January, a very rare **Duvaucels gecko** was found (unfortunately dead) in a rat trap. This confirmed that Duvaucels are still present on Great Barrier with the only other confirmed sighting being in 1970, some 40 years ago. Comprehensive follow up monitoring for a live specimen using G-Minnow traps was not successful but did show some of the range of lizard species present – shore skink, ornate skink, the uncommon striped skink, moko skinks, common skinks, and the common gecko. Both adult and juveniles of most species were represented indicating successful breeding.



The trapped Duvaucels gecko sent to Te Papa



Field worker Jess Rutherford checking the G-Minnow traps for Duvaucels

The current goal of the Trust is to find the most effective, cost effective, and socially acceptable way of keeping pests at very low densities. Each method needs at least two years of trialling before the efficacy can be assessed and seasonal variations and climatic events allowed for.

Since 1999 the Sanctuary has trialled 6 years of trapping, 4 years of traps with short pulses of rat bait (Feracol- cholecalciferol), 2 years of Pest-Off (brodifacoum) bait. We are currently entering our second year of the less potent Rat-Abate (diphacinone) pulsed three times a year. Trapping only has proven to be the least effective with a minimum of 30% and a maximum of 73% tracking tunnel percentages recorded. The prudent use of rat bait has hugely improved these percentages - the Sanctuary area average for 2010 was just 9%, the unmanaged Control 76%.

Excellent results have been generated this year by mixing methods. Over the autumn the perimeter track had the potent Pest-Off at 25 metre spacing with a rat trap station in between to compliment the multi-feed Rat-Abate on the internal tracks. This system appeared to reduce reinvasion and our April (peak rat numbers) tracking tunnel percentages were the lowest recorded since we began using tracking tunnels in 2004. Windy Hill pest managed area stood at 7.5%, Big Windy 0%, Benthorn Bush 0%, Benthorn Paddock 5%. Only Rosalie Bay, using a different baiting method was high at 30% with the unmanaged Control site at 70%.

# **Funding**

Our application to the ASB Community Trust for a one year grant was approved in May, for three years! Thank you - this really inspires confidence.

Other current funders include: Lotteries Environment, Biodiversity Condition Fund, WWF Habitat Protection Fund, Auckland Council Heritage and Environmental Initiatives Funds. Thank you for your generous and ongoing support. Thank you to those landowners who continue to contribute annually.

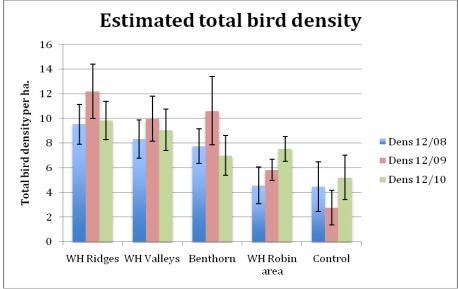
# DoC

An aspect of our restoration project I would like to highlight is the great relationship we have with both the local and area Department of Conservation. Over the 12 years that pest management has been carried out here they have contributed a steady stream of technical know-how and encouragement, and recently loaned us specialist equipment which they trained our field team to use. Bat listening devices were set up in the Sanctuary in February with a scientist now reviewing the data for suspected short tail bat 'chat'. The DoC team also assisted with the on-going cull of wilding pines in the Rosalie Bay pest managed area – 357 trees to date. Preliminary plans for a relocation of Hochstetters frogs, Towns skinks, and a booster translocation of North Island robins to the Sanctuary are underway, as well as a research project to breed and release kakariki in an attempt to re-establish kakariki in the southern end of the Island. These plans are well contributed to by DoC -partnerships of this nature are one of the ways that the Department can positively contribute to halting the waning of NZ's biodiversity outside of the DoC estate.

## Monitoring

In keeping with last years DoC audit recommendations for additional focus on threatened species, monitoring has been carried out for native bats(awaiting results), a survey conducted by John Ogden for Black Petrel nests, and comprehensive monitoring for lizards continues. On a single day during a survey in February four chevron skinks were sighted which is a record.

In December we carried out our **20**<sup>th</sup> comprehensive bird monitor – this involves the field team recording birds seen and heard for 432 three minute counts!



Overall average density of all bird species in the five locations, summer 2008 to 2010, with 95% Confidence Intervals (vertical lines above and below the average).

The above graph is taken from the report complied by John Ogden which shows that, while allowing for fluctuations, the overall trend for birds since 2008 is positive.

### North Island Robin

Thirteen young fledged from the last breeding season with most of these from the 3 breeding pairs settled at Windy Hill. Four young have remained in the sanctuary area which is an unusually high recruitment.

### Visitors

The Sanctuary continues to attract a range of visitors – Kim and Richard Collins (ASB Community Trust), Chris Morton and Biddie Winstone (Motutapu Restoration Trust), Rory Renwick, Geoff Woodhouse, and Amelia Geary (DoC), and Marc Slade (WWF) this year.

In concluding this newsletter I wish to acknowledge the tremendous input that this Trust receives from Trustee Professor John Ogden. His formidable knowledge of ecological matters, his practical and academic support of the restoration, monitoring, and research aspects of this project ensures that we work to a high standard with scientifically robust outcomes.

I would also like to hugely thank our volunteers Dave Harland and Brandon Kerr who together gift this project 21 hours per week!

## Kindest regards

Judy Gilbert – Trust Manager