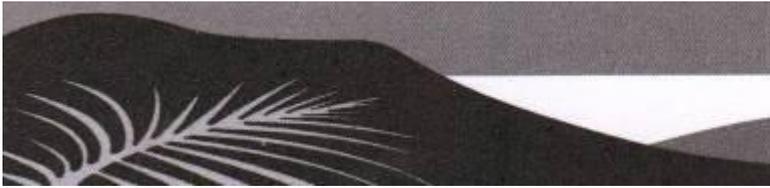


# WINDY HILL ROSALIE BAY CATCHMENT TRUST



## Newsletter #25 June 2014

### Kia ora

As I write this newsletter, northern Great Barrier is reeling in the aftermath of a vicious weather bomb. Not only is the damage to infrastructure and the 'urban' landscape really significant, and the wiping out of the historic kauri dam and miles of DOC tracks and bridges distressing, it is the unmeasured and irreplaceable loss of the hectares of mature forest, the loss of millions of creatures and their habitat that I mourn for. The higher section of the area in the photo below were pitted with our endangered black petrel breeding burrows, the kauri trees on the right would have provided nesting places for kereru, cavities for lizards, the larder for a zillion invertebrates, and the streams homes for native fish and eels. Conservation can seem so futile at times like this.



The community, together with DOC, are dusting ourselves off, beginning the long task of assessing what is left, reconstructing where it is possible, and looking to nature restoring what it can.

The pest proof fence at Glenfern Sanctuary took some big hits, particularly at its southern end, and stretches of tracks and boardwalks have gone. Manager, Scott Sambell, tells of an opportunistic rat tracked by his dog that made its way into the Sanctuary through a fence breach within a few hours.

Windy Hill Sanctuary came off lightly with the normal range of storm damage - from branches and trees down, to stream edges flattened, to our track system camouflaged in debris. We wonder where the birds go during these severe weather events and how they are affected. We do know from the last big storm in 2007 that the impact on the forest reduces the amount of food available the following season for birds.

On a happier note, we celebrate our 15<sup>th</sup> year of ecological restoration and pest management in the Windy Hill and Rosalie Bay Catchments. What a long way we have come, from a part timer managing 100 rats traps in 1999 to today - 620 hectares, 5000 trap and bait stations, 80+ kms of tracks, 6 employees, and three robin translocations under our belts. With the Sanctuary programmes entering a new level of sophistication using solar powered bird callers, an imminent kakariki breed and release

programme, and night action triggered cameras filming experiments with rats exploring stations and black petrel chicks coming out of their burrows, we are learning so much more about the dynamic of our forest.

The kereru have been spectacular this summer with around 100 birds in 3 flocks counted in the Sanctuary at Benthorn Farm one afternoon. Neighbour, John Kjargaard, took the photo below of nearly 50 kereru at the top of the Medlands Valley. Courting and nesting behaviour was observed in February and we have had confirmation that kereru did breed twice this summer. With a mast year for kahikatea there has been an extraordinary amount of food available and locals have enjoyed a respite from kaka eating all their fruit.



A mast year is also a boon for rats – in the South Island it is predicted that this year's beech mast will result in 30-40 million more rats! A female rat has around 11 young every 8 weeks and her young are ready to breed at 5-6 weeks of age which result, especially in these years of high food abundance, in colossal numbers. These rats will finish all the seed by the beginning of spring just in time to turn their appetites to eggs and chicks, and can wipe out an entire nesting season. In the Windy Hill Sanctuary we have kept up the pressure and trapped 1953 rats so far this year with an unknown number poisoned. Last year at the same time we had trapped 1600.

It has also been a bumper year for wasps and the field team have treated 36 nests.

Our goal to keep rats at zero to low levels with reduced amounts of bait and lower bait potency coupled with traps was achieved last year. The Little Windy Hill pest managed area tracking tunnel average for the year was 6.5% - our lowest achieved. Overall, the sanctuary average was 9%, in the unmanaged Control 62%. . This April, without the 'benefits' of a drought and plentiful food the rat tracking tunnel percentages are up – between 10 – 30% in the pest managed areas and between 45 -100% in the Control sites.

### **Pest Management Programme**

In August, we take another step in our research to find the most effective and most socially acceptable method of keeping rats at low densities over time, by introducing Vitamin B3 (cholecalciferol) as the main bait in our programme. Stations have been evenly split between Diphacene and traps for the last four years and this has worked well – we reduced the amount of bait and the potency of bait significantly with this programme.

Over the autumn the field team identified rat catches by species. 58% were kiore indicating the efficacy of reducing ship rats and the persistence of this smaller rat. Glenfern Sanctuary reports the same pattern and are convinced that kiore are breeding in the Sanctuary rather than travelling in. Discussions are underway with Auckland University for a Master student to undertake a thesis looking at the behavioural differences between these two rat species. This has management implications for the whole of the Pacific where these two rat species co-exist.

### **Red crown kakariki translocation**

We await a response from DOC to our application to bring 8 birds from the Mokohinau islands for our proposed breed and release programme. Thank you to Auckland Council EIF for funding the aviary and nesting boxes. Thank you also to Lotteries Environment for the grant towards the translocation and habitat protection, and thank you to the Ngati Rehua Ngatiwai ki Aotea Trust for their support of this project. Recently and unusually, Kakariki have been reported in Tryphena and Medlands with two birds sighted last month on Little Windy Hill – these will be important birds to add to the gene pool of those we propose to breed and release. The Trust has engaged bird guru Kevin Parker to work through the breeding and gene pool issues with DOC

and we hope to be able to go ahead with the first translocation later this year. This will be a long term programme of up to 15 years with the goal of establishing this locally critically threatened species in the southern end of the island.

### **North Island Robins**

We currently have 7 pairs and a few single birds in the Sanctuary, down from 8.5 pairs post release in 2012. While we are pleased to still have this many birds, the pattern of losing birds through dispersal is similar to our earlier releases. This is the key reason that we are keen to research a different method of reintroducing species back into the Sanctuary forest. Four of our robins are still being reported on Hirikimata (Mt Hobson) and a pair at Kaitoke.

### **Seabirds**

Field worker Henry Cookson's sharp nose picked up the fishy smell of two more black petrels chicks last month, late in the season. The burrows were gpsed and added to the map of seabird nesting sites in the Sanctuary. This map indicates two areas of greyfaced petrels, redbilled gulls, and a smattering of black petrels. We have yet to find the elusive Cooks petrel nesting spots.

### **Lizard Monitoring Programme**

Summer is a really busy time for the team as we monitor for lizards in trees, and on the ground using g-minnow traps and a variety of tracking tunnels. The results of the arboreal monitoring using specially built tracking tunnels is really interesting with 45 sets as high up as fifteen metres. 35 of these sets recorded weta, 27 recorded rats(!) with 7 recording a skink or gecko. Several of the tracking cards have been sent off for print verification for chevrons and possibly a striped skink.



Distinctive gecko prints with tail marks

### **The Money**

A huge thank you to the funding organisations that have supported the work of this Sanctuary over many years and the 50 landowners whose properties make up the Sanctuary for their continued contributions. While we can well document the ecological benefits of our work, it is the social and economic benefits to our community that often goes unnoticed. Shortly, we begin our 20<sup>th</sup> job opportunity since we began. Around 70% of the one and half million dollars raised since 1999 goes towards the wages of our field team and contractors – conservation \$ collectively make up a significant part of our small island economy and are one of the higher employment sectors. The potential for growth in this sector is greater than most others.

The current field team of Kevin Parsons, Rachel Wakefield, Henry Cookson, Dave Harland, and Dean Medland highly appreciate their jobs and grow in capacity and confidence as the years go by. The Trust has recently committed to pay the living wage to its employees as funds allow.

Thank you to local, Greg Elliot, who volunteers in the field on a regular basis. Thank you to Sealink/Freightlink for their continued sponsorship of our freight and Kelvin Floyd for our awesome maps. Thank you to Scott Macindoe for carefully managing our investment and supporting the Sanctuary in many ways.

We look forward to reporting again in December when the scars of the storm have begun to soften and we hopefully see our skies alive with kereru, the lizards basking in the sun, and forest in bloom.

**Judy Gilbert**

**Sanctuary Manager**