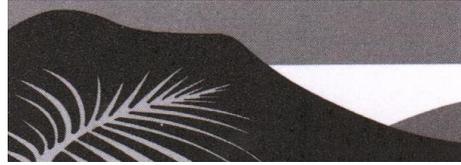


Windy Hill Rosalie Bay Catchment Trust



Newsletter #9 June 2006

Kia Ora

This is a really interesting time to be involved in pest management, especially in a project that has a particular focus on rats. There is a current focus in NZ and internationally on the impact of rats in forest habitat and on commercial crops so over the year more new information about rat diet, behaviour, territory, and responses to different forms of management has come across my desk than ever before.

Even after seven years it is still assumptive to establish 'norms' about what happens when we manage rats as it seems that climate, the subsequent food availability, and the inter-relationships this creates between species, dictates. This last summer has seen enough rain to ensure a very productive autumn, couple that with a previously mild winter with a very low die off of rats, and you have vast numbers of rats coming into this winter. This is a new pattern from just two years ago. Darren Peters, of the Department of Conservation Science and Research Unit, believes this is may be happening all over the country.

This makes the job of keeping rats at low densities on average throughout the year a real challenge and one which the Trust field team have readily stepped up to.

Field Work

The team of field manager Kevin Parsons, and field workers Rachel Vlasich and Dave Harland, who started in February, are working to a very high standard. They are ably assisted every fortnight by volunteer Des Casey. Thank you to Grant Elliot who also volunteered over the summer.

We have nearly completed our first year of the new programme of a combination of trapping and toxin pulses. Two pulses, the first a week long last August and the second of three weeks in December, has resulted in much lower tracking indices that the previous year. In December we recorded an all time low of 7%. To trial lowering the reinvasion rate from outside the managed area over the autumn, poison was placed at 25m intervals on the perimeter track with a significant reduction in just two weeks from 80 rats trapped on the perimeter to just 12. This perimeter track now takes 7 hours to cover. Thank you to the Auckland Regional Council EIFund for the grant for toxins.

The team is at full stretch to manage 2000+ covered rat traps and 80+ cat traps, undertake bi-annual toxin pulses, a comprehensive monitoring programme, threatened species plant and animal management, collecting data, and carrying out research and trialling of equipment. We are constantly assessing our progress, new equipment, and new methods of accumulating data. Rachel and Dave attended a two day chain-sawing workshop in April while Kevin attended a WWF one day workshop in Wellington with other restoration project people from all over NZ. The team, including the volunteers, is booked in for an Outdoor First Aid certificate in July. Over the summer Dean Medland was contracted to develop a track system in the Big Windy Hill pest management area on four neighbouring blocks thanks to funding from the WWF Habitat Protection Fund. A perimeter track and 13 internal tracks now cover this

approximately 150 hectares. Trails of trap covers and traps are currently underway, equipment is being set out, and the plan is to toxin pulse this new area in August. The initial knockdown of rats will be followed up with trapping in keeping with the other two project areas at Little Windy Hill and Benthorn Farm. Rat tracking tunnel indices in this new, as yet unmanaged, area stand at 90%. Comparatively Windy Hill has 24%.

Monitoring Programme

Rats - Monthly monitoring of the 100 tracking tunnels takes six full working days but gives us clear information about rat patterns in relation to trapping, the moon, and the season.

Associate Professor John Ogden worked with the team earlier in the year on sexing and aging trapped rats. This data is now being noted along with the three different morphs (varying coat colours) of ship rats.

Birds - The team enjoyed a three day bird monitoring workshop with Dr Sam Ferreira in February. There was a mix of the theory of the style of monitoring we do here, a review of the results of six years of monitoring, and some in-the-field training and assessment of monitoring accuracy. Two new bird transects were established in the North Island robins territories bringing the total number of transects to 14. Each transect has 4 stations 25m apart and in June and December each stations is monitored six times for a three minute period.

Lizards and Wetas - the monitoring of lizards and wetas is to be added to the programme from June of this year. 10 lizard 'motels' made of layers of squares of Onduline are to be set up along a valley track that has a variety of forest types. In the same vicinity hollowed sections of bamboo have been attached to trees to create weta 'motels'. These will be monitored monthly for variety and densities. Training in identifying and handling will be carried out with Halema Jamieson from GBIs Department of Conservation. A permit to allow us to handle lizards is in process.

Seedlings - monitoring of 6 rat preferred seedling species will be introduced next spring and autumn in four locations.

Control Monitoring Programme

The Trust successfully applied to the Biodiversity Advice Fund for funding to establish a one year control of the same monitoring we undertake in the managed project area. Dean Medland will monitor birds, rats, lizards, wetas, and seedlings at the same time and in the same way as is done in the managed area. The aim is to establish comparative data of a variety of species on pest-managed and unmanaged land.

North Island Robins

The breeding season finished in February with 16 robins successfully fledged from 5 pairs. This is a comparatively good result with other robin sites. Those robins that nest well within the boundaries of the managed area had a better success rate than those that nest close to, or in some cases on the boundaries, where it is difficult to protect them from rats invading the managed area. Negotiations are underway with neighbours to enlist their cooperation in allowing a buffer zone to be established to increase the breeding success rate. Predation of eggs and chicks was 14% lower than the previous season. Juveniles from this season have been spotted on the Peachgrove track near Mt Hobson, at Whangaparapara, and in Tryphena. We have been granted our banding permit for next season.

Funding

We have received a \$5000 grant from the Biodiversity Advice Fund to establish our "To protect it you have to measure it" control monitoring project and also an \$8000 grant from the Auckland City Heritage Fund towards wages and toxins. Thank you. Applications have been lodged with Lotteries Environment and the Biodiversity Condition Fund.

Networking

A week in Wellington last March was extremely worthwhile. Meetings with the Lotteries Environment, the Biodiversity Condition Fund, and the WWF funding managers achieved a higher profile for both the Windy Hill and the Great Barrier Island Trusts. It is clear that there is no existing policy to long term fund biodiversity projects such as ours and the need for this was discussed with all these groups. Our long term position is as vulnerable as it has ever been except if we can continue to expand into 'new' territory and keep up with 'new' initiatives within our existing programme.

An excellent discussion with Darren Peters of Department of Conservation Science and Research unearthed that the Department of Conservation 5% benchmark for acceptable pest densities was established as part of the kokako programme in the Te Ureweras - it is a guide only. There has been no research done to date as to what levels of pests can in fact be present for outcomes to still improve for birds etc. The Department of Conservation plans to undertake research to establish what levels of pest densities can be present and have the biodiversity remain stable or improve. The outcome of this research will be very important for those projects throughout NZ that can only afford long term to manage pests and not eradicate them.

A meeting was also held with Liz Jones, the National Operations Manager at WINZ and discussion took place about our employment scheme. Meetings have also been held in Auckland to review our WINZ contracts for the next year.

Wharf Biosecurity

The contract the Trust has with the Auckland Regional Council Biosecurity Unit to manage the monitoring tunnels at Tryphena and Whangaparapara Wharves is to be renewed for the next year. This generates a small income for the Trust while at the same time performing a very necessary function.

Rare Bits

The locally rare green mistletoe has been successfully propagated by Peter Speck at Benthorn Farm. From just two plants Peter has collected seed and now has over 30 plants established, some of which are flowering. This month he will share his expertise with this plant with the Department of Conservation.

32 pimelea tomentosa plants have been fenced to protect them from rabbits and are being kept clear of other vegetation. A number of new plants have shown up in the Big Windy pest management area and may also be protected likewise.

We have successfully eradicated the exotic water weed Ludwigia palustris from the two known sites in the Medlands valley stream and monitoring will be continued for some time to ensure it remains so.

A black petrel chick was confirmed on a nest in the managed area in February and two young birds narrowly missed on the road last week. These birds leave their burrows and do not return for some three years.

Only one pateke(brown teal) duckling survived from five this season.

Thank you to the following Trust & Project Sponsors:

- ✎ **Biodiversity Condition Fund**
- ✎ **WWF Habitat Protection Fund**
- ✎ **Scottwood Trust**
- ✎ **Pacific Development and Conservation Trust**
- ✎ **QEII National Trust**
- ✎ **Auckland Regional Council Environmental Initiatives Fund**
- ✎ **Auckland City Council Heritage Fund**
- ✎ **Transpower Landcare Trust Grants**
- ✎ **Lotteries Environment**
- ✎ **Subritzky Sealink Ltd**
- ✎ **Wilson & Macindoe Ltd**
- ✎ **WINZ & DoC**
- ✎ **Great Barrier Airlines**
- ✎ **Fullers**
- ✎ **Reubens Water Taxi**
- ✎ **Great Barrier Landowners**
 - ~ **Little Windy Hill Co Ltd**
 - ~ **Benthorn Farm**
 - ~ **Macnee**
 - ~ **Wilkinson**
 - ~ **Sommerville & Nicolson**
 - ~ **Blaiklock**
 - ~ **Henderson**
 - ~ **Tschirky**

Judy Gilbert
Trust Manager