



WINDY HILL - ROSALIE BAY CATCHMENT TRUST

Windy Hill Sanctuary  
Goodnature A24 Trap Project



Report #8

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## Background

The Goodnature A24 Trap project is a collaboration between the Great Barrier Local Board, Auckland Council, Department of Conservation (DOC), Goodnature Ltd, and the Windy Hill Sanctuary. Its purpose is to establish how effectively the non-toxic, self-setting, multi-kill Goodnature A24 trap is at reducing both ship rat and kiore densities within a pest managed Sanctuary on Great Barrier Island. This objective supports the local community aspirations to find ways to manage these pests with non-toxic methods.

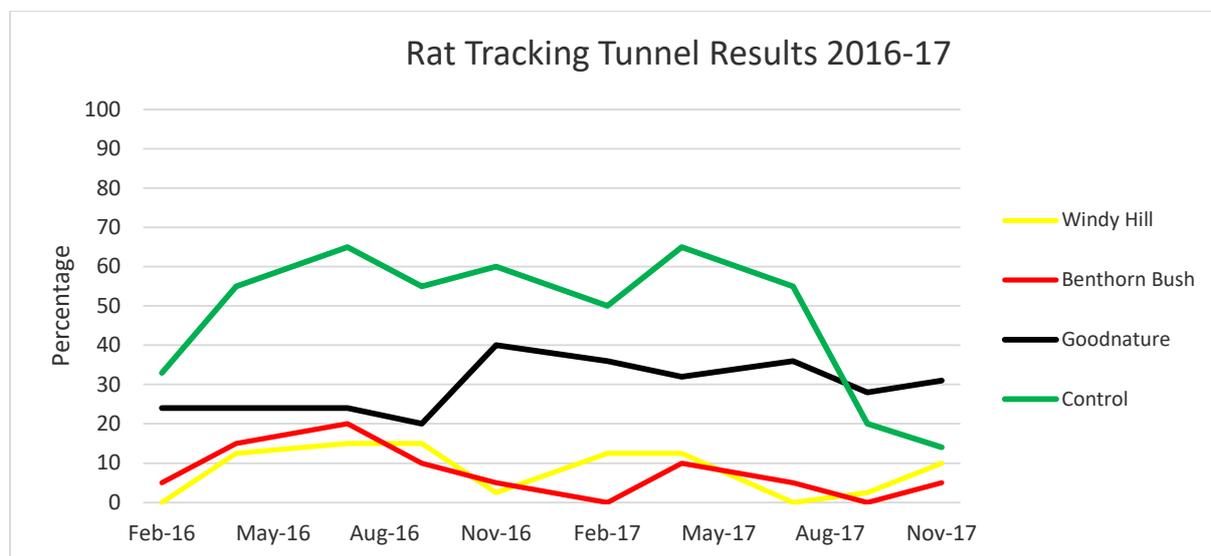
Two hundred and ninety-three A24 Goodnature traps were established in the Big Windy Hill Pest Managed Area in the Sanctuary between February 22 and 24, 2016 by a team made up of personnel from Auckland Council, DOC, Goodnature, and the Windy Hill Sanctuary.

The project was originally planned for a two year period - this has now been extended to August 2018 by the Great Barrier Local Board to allow more time for the project.

## Actions and Outcomes

Traps were checked monthly for the first six months, and then every 3-6 months following the replacement of the manual lure with the chocolate flavoured auto-lure pump (ALP) in August 2016. Ship rat and kiore body counts were recorded – 90% ship and 10% kiore in the first 6 months. Bait and gas cylinders have been replaced at six monthly intervals and rat tracking tunnel monitoring undertaken in January, April, July, September, and November each year.

Rat tracking tunnels have remained between 20 and 40% since the A24 project commenced. The graph below illustrates the differences in tracking tunnel percentages for the neighbouring Windy Hill and Benthorn Bush pest managed areas and the unmanaged Control.



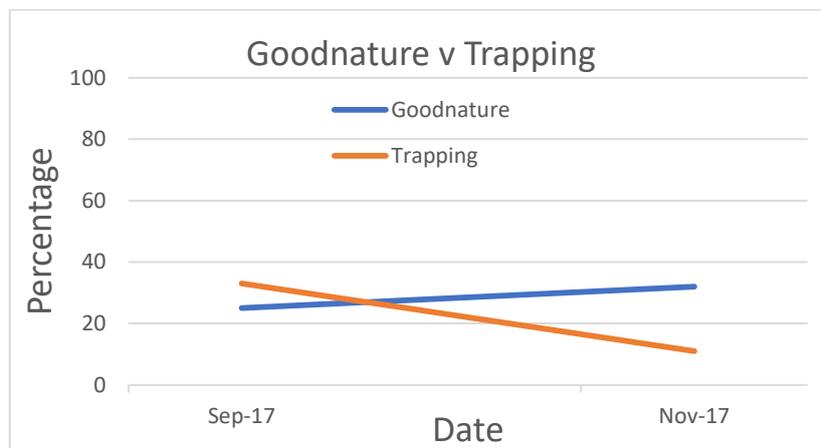
Rat catches from two trapping lines opened between April and June 2017 in the Goodnature area showed that more than 50% were kiore. Following discussion with DoC and Goodnature it was agreed to reduce the spacing between devices to 25metres to potentially address the smaller home ranges of kiore and increase the likelihood of interaction with the A24s.

On 29<sup>th</sup> and 30<sup>th</sup> August 2017, the Windy Hill field team worked alongside Nick Graham and Chris Dwan from Goodnature to move 124 of the A24 units from the coastal side of the project area and

interspersed these with the units on the inland area of the project at 25 metre spacing. Traps at 50 metre spacing were established in the area marked in red and subsequently checked monthly. 45 rats have been trapped since the changeover.



The 25 existing rat tracking tunnels marked in blue are now split - 16 in the Goodnature area and 9 in the rat trapping area. The results from two rat tracking monitors since the changeover is below.



### ALP and Gas Changeovers and Checks

During the changeover operation in August 2017 with the Goodnature team, it was found that 9 of the units had no gas left and that 43 of the ALPs appeared not to have dispensed any bait and were still full. The latter is a significant percentage of units and raises some concern about the consistency of the ALPs.

5 of the 9 gassed out A24s were units where the bait had congealed around the trigger indicating this may have been the cause.

In order to get a comparative picture of the efficacy of the ALPs contact has been made with Mt Bruce, Boundary Stream, Ark in the Park, Lyndsay Wilson, and the Hollyford Community Trust. A spot check protocol has been shared. A general consensus shared by these A24 projects is that 4 months is the most effective life for the lure in the ALPs.

A further spot check of 70 units was carried out in December 2017, 4 months after gas and ALP renewal. It was found that all traps fired when manually triggered, 2 of the ALPs appeared not to have dispensed bait – judged by the fullness and the softness of the ALP, and in 12 of the devices bait was blocked around the trigger – the lure thickens and hardens forming a ‘skin’ which appears to prevent any additional lure dropping down to below the unit. No kills were observed under traps.



Lure forming around the trigger

Discussions have been held with Goodnature and DOC regarding changing to a peanut butter based lure – both responded that their trials have shown the chocolate based mix is the most effective.

The field involvement and supervision of the team from Goodnature has been important and appreciated. It ensures that the deployment and operation of the units by the Windy Hill field team is to standard.

### Next Steps

- ALP and Gas changeover in February 2018.
- Further data on the state of the ALPs will be collected at that time.
- Information from other Goodnature projects in NZ will be collected and added to the next report.
- Rat tracking tunnel monitoring will be carried out in Jan/Feb, April, and July with results split between the Goodnature and rat trapped area.
- Auckland Council and the Great Barrier Local Board will need to decide what is planned for the devices at the end of the trial period in August 2018. There is the potential to trial the devices on the Sanctuary perimeter to assess if this reduces reinvasion.

Thank you, Nick Graham (Goodnature), Darren Peters (DOC), Auckland Council, and the Great Barrier Local Board for your involvement and support of this very worthwhile project. Thank you, also, to Kevin Parsons, Rachel Wakefield, Abby Naismith, and Henry Cookson for their diligent work as the Sanctuary field team.

Judy Gilbert  
Sanctuary Manager