

Pest control at Rewanui

Our long-term aim at Rewanui is to reduce pest animals to very low levels, so that native animals and plants can thrive. The worst pests on farms with native bush are possums, rodents (rats and mice), mustelids (ferrets, stoats and weasels), feral cats, and hedgehogs. These species either prey directly on desirable native species, or compete with them for food and habitat. All these pest species have been found at Rewanui.

We began controlling pests in 2006, targeting mainly possums and rats. In 2008 we intensified the pest control, and also began a native wildlife and pest monitoring programme. We wanted to find out (i) how effective our pest control was in killing pests, and (ii) whether native wildlife recovers once pests are controlled, and how quickly.



A ferret caught in a Fenn trap located underneath a tunnel (baited with an egg). 1. Timms trap. 2. Sentry bait station. 3. Trapping tunnel.

Pest control programmes at Rewanui

Rewanui benefits from regional Animal Health Board possum control to prevent the spread of bovine tuberculosis. Possum numbers are very low as a result.

We run two pest control programmes specific to Rewanui:

1. Greater Wellington Regional Council (GWRC) biosecurity staff control possums, rats, mustelids, cats, and hedgehogs, property-wide. They service eighty four sites monthly, each with:
 - a Sentry bait station erected above grazing animal height, filled with waxed brodifacoum pellets. Target species – possums and rats, with the possibility of some secondary kill if mustelids eat poisoned carcasses.

- a Fenn Mark 4 trap set beneath a tunnel baited with beef offal. Target species – rats, hedgehogs and mustelids.
- a Timms trap baited with beef offal. Target species – feral cats and ferrets.

GWRC also sets DOC 200 predator traps along the walking tracks. Target species – rats, stoats and weasels.

2. From September to February (the most vulnerable time for nesting birds), another contractor sets additional Pindone poison bait stations in the western forest areas. Target species – rats and possums.

Pest kill in traps, September 2006 to July 2010

Pest	Feral cats	Rats	Hedgehogs	Stoats	Weasels	Ferrets
No. trapped	61	384	319	8	13	26

Results of our pest control

Our trapping programme has killed high numbers of pests over the past five-plus years. Many more rats, and some possums, will also have been killed with poison bait.

By monitoring pest abundance using tracking tunnels we know that, by the end of 2010, rat numbers were below the 5% target set for our monitoring counts (down from 13% at the start of monitoring). Possum numbers were below the 2% target. To maintain numbers at these low levels, we must continue pest control indefinitely. Most pests are both mobile, and rapid breeders, so their numbers quickly recover once control stops.

Impact of pest control on native wildlife

Surveys of birds, lizards, invertebrates, and vegetation have all been undertaken at Rewanui. These surveys provide a baseline from which the outcome of continuing pest control can be measured. Weta numbers already are increasing, thanks to rat control. We need to keep monitoring for several more years before we can draw any firm conclusions about how well native species' populations are recovering.

If populations of monitored native wildlife do not increase after a few more years, we may need to increase the range and intensity of pest control, especially during the crucial spring/early summer period when birds are nesting.



Rat and possum preying jointly on a thrush's nest.

Cost of pest control at Rewanui

The GWRC pest control programme at Rewanui costs over \$4000 a year (\$330/month), due to monthly visits by staff to service the 84 stations.

Most landowners will be able to carry out effective pest control themselves, so financial costs will be limited to purchase of traps, bait stations and bait, likely to be only a few hundred dollars a year.

Advice for people keen to do their own pest control

1. Seek advice from someone with experience before you start – there are lots of tips and tricks which will help you control pests more effectively.
2. Monitor pests before you start control, to get an idea of what pests are most abundant and where they are on your property. Your regional council biosecurity team or private contractors can help with this.
3. Contact your regional council biosecurity team for advice; also supplies of traps, bait stations, and bait.
4. Concentrate your control efforts between September and February.

More information

1. About pest control and monitoring at Rewanui

See other Information Notes in this series.

2. About the work at Rewanui

Montfort Trimble Foundation:

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Nyree Fea was responsible for wildlife monitoring, 2008–2011.

The GWRC biosecurity team has carried out pest control at Rewanui since 2006. Trevor Thompson (QE2 Trust) runs our spring/summer pest control programme.

Rewanui is a typical hill-country sheep and beef farm in eastern Wairarapa. The 344-hectare farm belongs to the Montfort Trimble Foundation, a trust dedicated to growing trees for the benefit of local people. The farm is being developed as a trial and demonstration property. Our focus is on new approaches to adding trees to the farming mix.



Photos: Murray Clark, Nyree Fea, Nga Manu Images.