



Restore
Hibiscus & Bays



June 2020

Predator Control Methods and Best Practice.

Predator control is something we can all do to create safe habitat for native birds and other wildlife to nest, roost, breed and feed. This document outlines methods recommended by Restore Hibiscus & Bays for best practice in predator control. It is intended as guidance for newly forming groups and projects, or for individuals working on predator control on their own property outside of an existing project. If working with established groups or projects, please ask your project coordinator or group leader for standard operating procedures specific to your project. Find some of the groups and projects in the Restore Hibiscus & Bays network. [Link Here.](#)



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Research into predator control is ongoing and predator control methods are constantly being improved. We will aim to update this document with the latest evidence and understanding of predator control best practice, in collaboration with our network, Council and the Department of Conservation. Following best practice will not only be most effective for protecting our wildlife, but also help to keep workers, volunteers, landowners and bystanders safe

Pulsing

Pulsing means that predator control is conducted at intervals. It is more resource effective, targeted, easier on volunteers and residents, reduces the risk of 'shy' predators and, when using toxins, reduces the risk of secondary poisoning to other animals such as pets. Pulsing can also avoid toxins becoming old and non-effective.

Restore Hibiscus & Bays and Auckland Council recommend that volunteers pulse four times a year in February, April, August and November for controlling rats, possums and mustelids. These months match the availability of resources and breeding times for both rats and native bird life. A pulse lasts four weeks in total. In order to minimise workload for individual volunteers, groups and projects may wish to consider having a team of volunteers to maintain each line.

We recommend using chew cards, monitoring tunnels and wax tags to find where pests are present and to help inform the specific location and placement of bait stations and traps. Please read our [Health and Safety guidance](#) with regards to the handling and use of toxins and mechanical traps.



Rat approaching a piwakawaka nest
Credit: Nga Manu Images NZ

Rats

Rats can be controlled using mechanical trapping or toxic bait.

For mechanical trapping, we recommend T-Rex traps or a Modified Victor (for large water rats) inside wooden boxes. Placement of the traps is really important. Please get in touch with us for guidance on this or review many of the predator free resources available.

You can use peanut butter as a lure or chocolate, but it's best to keep it varied to continue to entice the rats in. Set the trap inside the box, furthest away from the entrance. Check every 1-3 days in the first week or two of the pulse. You can check less frequently after that.

If using toxic bait, we recommend pulsing with two kinds of poison: CONTRAC (a single feed, Bromadiolone bait) and DITRAC (a multi-feed, Diphacinone bait).

We use a first pulse with CONTRAC, ideally in August (prior to bird breeding and in line with the Auckland Council Parks Ecological Restoration Contract), followed by three DITRAC pulses. We continue with this regimen every year, using CONTRAC every August and DITRAC for the other three pulses where practical. DITRAC has a lower risk for secondary poisoning than CONTRAC.

The blocks of bait should be placed inside a lockable bait

station with pins to hold the blocks. The bait station should be locked to keep the bait inaccessible to children, pets and other non-target creatures

When choosing whether to control rats with mechanical traps or toxic bait, there are many factors to consider, including the personal preference and experience level of volunteers, the requirements of the land owner or manager, time efficiency and the ongoing sustainability of the project. It is sometimes a good idea to switch between methods.

Please get in touch with our team if you'd like to discuss about which method is right for you and your project.



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Placement of rat traps and stations

Place one trap or bait station approximately every 50m along lines 100m apart. This is within the home range of every rat, and means they have 100% chance of coming across a station.

In general, they should be placed along ridges, stream banks, coastal edges and, within backyards, along fence lines and areas where there is security for a rodent (i.e a garden shed) or pile of debris.

Sometimes rodents may not enter a trap or bait station if other handy food sources are available, so encourage landowners to make sure rubbish bags are not left around.

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Bait freshness and replenishment is very important

Single feed toxins have a higher chance of a lethal dose, useful during your very first pulse to knockdown the population. After putting toxic bait out on Day 1, CONTRAC is checked and refilled two more times (i.e Day 7 and Day 14), before removing all bait at the end of the fourth week (Day 28).

Multi-feed toxins (DITRAC) must have bait present for at least 5 nights for a rat to consume a lethal dose. Therefore you must check it more regularly (Day 1, 3, 5, 14 (17) and 28).

When checking and refilling bait, any loose, largely eaten or moldy bait should be replaced with a new block.

At the end of a pulse (end of the fourth week) – all bait must be removed from stations and disposed of safely. Double wrap in newspaper, a plastic bag and put out with your general rubbish (don't let dogs get to it) – which goes to an actively managed landfill.



Possum scavenges a kereru egg
Credit: Nga Manu Images NZ

Possoms

Possum control can be pulsed at the same time as rat control. Each possum pulse lasts two weeks although in areas surrounded by a great deal of bush, it may be extended to four weeks.

We recommend using mechanical trapping with Timms traps or the Flippy Timmy. They can be checked at the same time as visiting the rat toxin stations, or at least two times in the first week and one time in the second week.

Traps on public land should be placed at least 10 metres off track and hidden from public view if possible. If the above is not possible, the trap should be raised 1.5 metres off the ground to reduce risk to children and pets. In a dog off-leash area, or other site where

there is a higher than normal likelihood of pets or children encountering the traps, traps should always be raised, even if they are well off track. The Flippy Timmy is a good option for a raised trap. If raising a Timms trap, it should be on a flat platform, so that the trap sits flat as it would if on the ground. Timms should not be attached to the side of a tree.

There are a range of options to lure possums – apple, cinnamon, icing sugar or flour, lemon, Goodnature gel on a sponge (jam sponge method), aniseed oil, or apricot. Never use meat as a lure. We advise you use an 1/8th to a quarter of an apple to encourage possums to reach into the trap with their mouths rather than paws. Also a blaze of flour, icing sugar and cinnamon

leading up to the trap can be effective. We recommend you have a support system in place of volunteers that can deal with any possums that have not been cleanly killed, as well as joeys.

We recommend placing possum traps approximately every 100m x 100m. Locations should be prioritised for the likely possum habitat, as well as for landowners that request them because of known possum activity. Ideally, they should be placed along ridges, tracks, road edges, near kohekohe, totara, pine, pōhutukawa, macrocarpa, roses or fruit trees. Placing them in close vicinity to suitable dry nest sites such as in roofs and around houses, hedges or flax is also preferred.



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DOC traps can be pulsed at the same times as rat control and the traps checked at the same time as visiting the rat stations, or a minimum of weekly. A variety of lure types can be used, including egg, fresh or salted rabbit or long life Erayz blocks.



Stoat on the forest floor
Credit: Nga Manu Images NZ

Mustelids - stoats, weasels and ferrets

For mustelid control, we recommend mechanical trapping with the DOC series traps - DOC 200, 150 and 250.



Weasel with dead gecko.
Credit: Nga Manu Images NZ

Volunteers must be confident to use DOC series traps safely (please see our Health & Safety guidance). The traps need to be tested and maintained on a regular basis. Be aware that you may catch hedgehogs and the occasional blackbird.



Ferret with dead rabbit
Credit: Nga Manu Images NZ

Due to the wide home range of mustelids, DOC traps should be placed approximately every 100m along lines that are 600 m apart. Ideally, they are placed along stream edges, ridges, fence lines, animal runs or near chicken coops, near fallen logs or trees and open pasture. The DOC series traps are expensive tools so need to be placed carefully and out of sight.



For further information and resources:

Please refer to the following documents and email us at info@restorehb.org.nz with any questions:

[Health and Safety Guidance](#)

[How to set a rat trap video - Pest Free Kaipātiki](#)

[How to set a bait station video - Pest Free Kaipātiki](#)

[Reporting on Trap.NZ](#)

[Department of Conservation Practical Guide to Trapping](#)

[Other Predator Resources](#)

[To borrow tools and equipment from Restore Hibiscus & Bays, visit our tool library.](#)

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