CREATED BY

PEST FREE KAIPĀTIKI RESTORATION SOCIETY

# VERRAN GULLY HALO COMMUNITY PLAN

2021 - 2026

# KIA ORA RAWA ATU TO OUR KEY SPONSORS:

Auckland Council
Te Kaunihera o Tāmaki Makaurau

BLT
Birkenhead Licensing Trust

Kaipātiki Local Board
Auckland Council

# INTRODUCTION

## WHAT IS A HALO?

Ecological Halos protect our native wildlife by maintaining and restoring our native ecosystems and minimising the risk of re-invasion from pest species. They are made up of the community of people living around special natural features or reserves who act as kaitiaki (guardians) by:

- Controlling pest plants and animals on their properties around the reserve
- Assisting with the control of pest plants and animals within the reserve
- Helping with the management of pathogens such as kauri dieback disease
- Planting native plants on their properties and within the reserve

## WHAT ROLE DOES PEST FREE KAIPĀTIKI PLAY?

Pest Free Kaipātiki (PFK) provide resources and advice to the community to assist with the restoration and protection of reserves. PFK are actively involved in the conservation of Auckland's native wildlife, but the scale of the problem posed by invasive mammalian predators and environmental weeds requires a community effort. This is why we focus on empowering the community to help conserve our wildlife. To assist, we create management plans such as this one, we provide the tools and resources to do the work through our community tool shed and our restoration advisers provide expert advice where it is needed.

## A MESSAGE FROM OUR CHAIR

It is with great pleasure and some excitement that I introduce the Verran Gully Halo Plan for the Kaipātiki Community that aims to significantly reduce and eliminate invasive pest species in the area.

I would like to recognise and congratulate the residents and community groups surrounding Verran Gully for the significant restoration works that have already been completed to date. Groups have cleared large sections of pest weed species, maintained trap lines and committed to working bees. This work will give us a good platform to launch the Halo from.

The Halo concept enables us to have a greater focus on ecological restoration around areas of significant ecological value such as our kauri reserves. The Auckland Council funding provides us an opportunity to run year-long programmes supporting volunteers, community groups, schools, business and contractors

Regards,

# VERRAN GULLY HALO
## BACKGROUND

The Verran Gully Halo area covers nearly 93 hectares; Verran Gully, Castleton Reid, Ridgewood and Park Hill Reserves and the nearby surrounding streets make up the Verran Gully Halo. Large areas of Significant Ecological Areas (SEAs) are found within the halo, including two endangered ecosystem types; kauri, podocarp, broad-leaved forest and taraire, tawa, podocarp forest. These ecosystems are vital for providing important seasonal food, roosting and nesting sites for numerous birds, bats and insects. Recent observations of longfin eel, banded kokopu, redfin bully and crans bully in the Halo area have been recorded. Verran Gully Bush Reserve and the surrounding private properties also contain a number of large kauri trees.

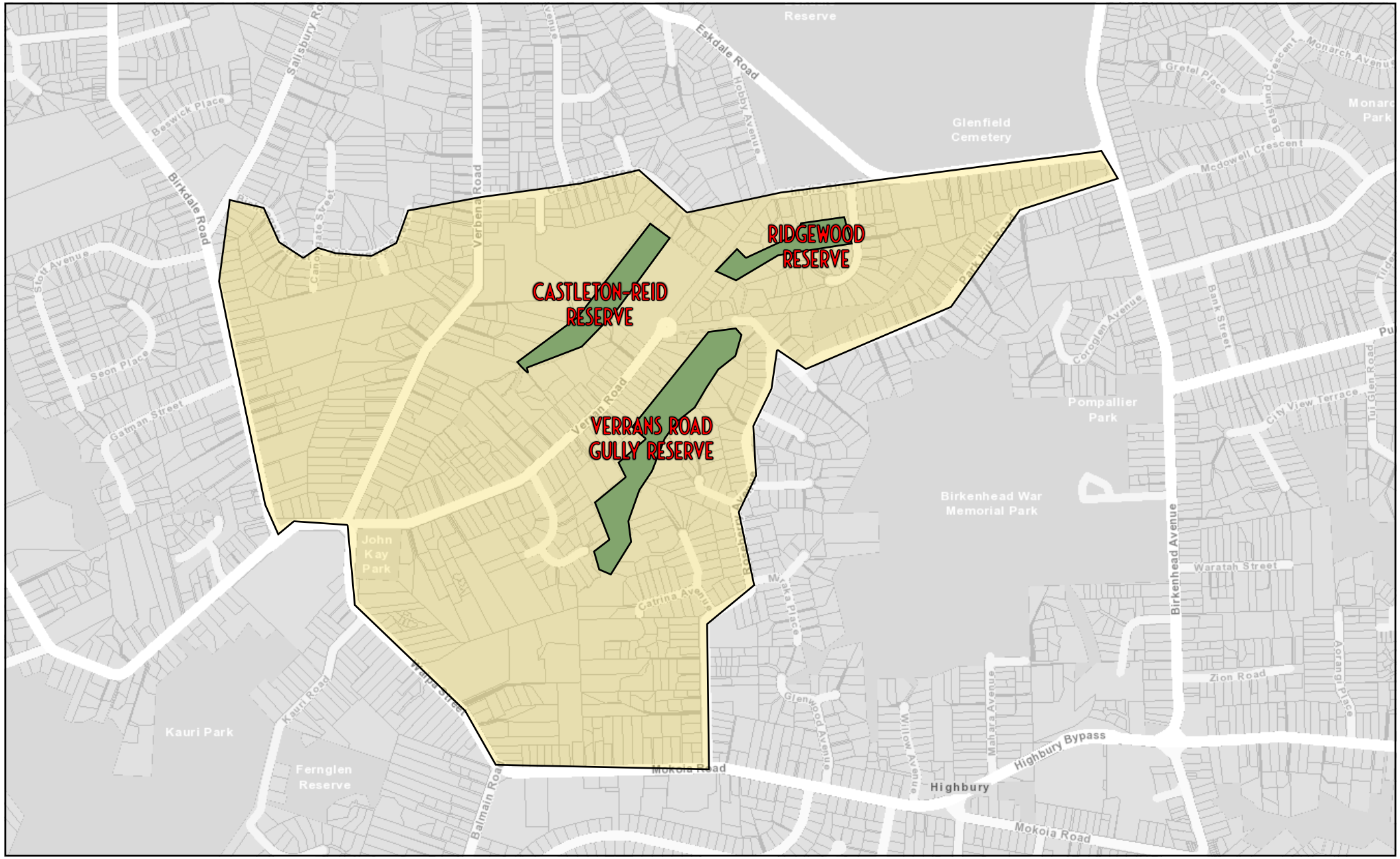
For many years, residents and community members of VERG (Verrans, Eskdale Restoration Group) have been clearing out weeds and setting predator lines to trap rodents, providing protection for native species and facilitate the return of native bird life and other species such as the forest gecko, copper and ornate skink which have been recorded within two kilometres of Castleton-Reid reserve.

Sadly, in 2018 it was discovered that some kauri in nearby reserves were infected with kauri dieback disease (Phytophthora agathidicida) for which there is no known cure. Reserves with at-risk kauri trees were closed as a precaution against further spread of the disease. Importantly, the inaccessibility of Verran Gully may be a saviour as its inhospitable terrain render it an 'inland island' and reduce the chances of kauri dieback pathogen being spread by humans into the reserve. Local residents can help to ensure the kauri nearby stay free of dieback by cleaning shoes before entering any reserves and attending free workshops on kauri care.

In December 2018, PFK was successful in obtaining a grant from Auckland Council to establish a Halo around these reserves and surrounding residential properties to maximise the ecological health of the halo areas and decrease the impact and spread of kauri dieback. This grant enables us to support community driven initiatives such as predator and weed control, with the aim to be pest free by 2026. In addition a new initiative to restore John Kay Park was also started in 2021.

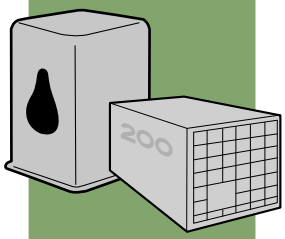
Thanks to a grant from the Kaipātiki Local Board, restoration plans for Verran Gully, Ridgewood and Castleton-Reid Reserve have been developed. The Restoration Plans identify four management zones for Verran Gully and Ridgewood, and five for Castleton Reid reserve, making professional recommendations for weed, predator and restoration actions within each zone. The Restoration Plan is referenced and used heavily to inform this Pest Free Community Plan. The Community Plan essentially delivers the actions of the Restoration Plan and the aspirations of the community within the entire Halo.

# HALO MAP


RIDGEWOOD RESERVE
CASTLETON-REID RESERVE
VERRANS ROAD GULLY RESERVE
Glenfield Cemetery
Pompallier Park
Birkenhead War Memorial Park
John Kay Park
Kauri Park
Fernglen Reserve
Highbury
Eskdale Road
Birkdale Road
Verrans Road
Mokoia Road
Highbury Bypass
Birkenhead Avenue
Waratah Street
Zion Road
Mcdowell Crescent
Bank Street
Coroglen Avenue
City View Terrace
Catrina Avenue
Glenwood Avenue
Willow Avenue
Mahara Avenue
Balmain Road
Kauri Road
Seon Place
Gatman Street
Beswick Place
Gretel Place

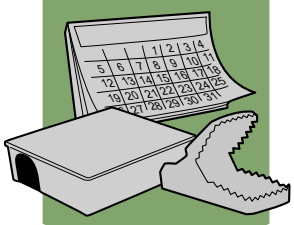
# PEST ANIMALS
## GENERAL STRATEGY

### PLACE CONTROL DEVICES



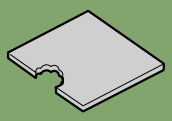

Due to the narrow and long shape of Verran Gully and Castleton-Reid reserves, predators can be maintained at low numbers if an entire ring of traps or bait stations could be placed on private property around the reserves. This also prevents the need to enter the forest and risk further spread of the disease. Timms and DOC200 traps can be deployed immediately and left out year round.

### TRAP AND BAIT RATS IN PULSES



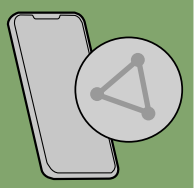
Rat traps and bait stations can be deployed and baited synchronously in pulses to increase their effectiveness at controlling rat populations. Pulses are conducted four times a year in February, April, August and November (see Annual Calendar, page 9). To learn more about predator pulses visit: www.pestfreekaipatiki.org.nz/predatorcontrol.

### MONITOR PROGRESS AND RESPOND



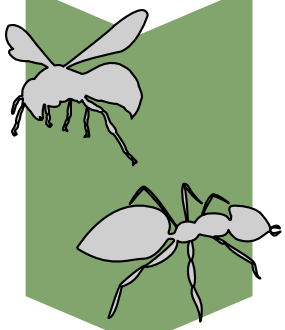
Use chew-cards, tracking tunnels and catch rates to monitor the distribution and trend in populations of mammalian pests. Chew cards and tracking tunnels can be helpful to identify when trap-shy predators are still present. Trapping effort can be increased in different areas across the Halo in response to the results. To learn more about how to monitor pests with these methods visit: www.pestfreekaipatiki.org.nz/predatormonitoring.

### RECORD TRAP RESULTS ON ECOTRACK



Record all trap results in EcoTrack. This allows PFK to monitor and analyze the data in Verran Gully Halo and across Kaipātiki as a whole. Ecotrack can be downloaded from the Google Play Store or the Apple Store, or by visiting the EcoTrack home page: www.ecotrack.nz. Instructions on how to use EcoTrack can also be found on PFK's website: www.pestfreekaipatiki.org.nz/ecotrack.

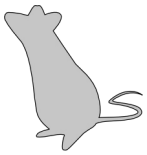
### REPORT WASPS AND ANTS



Wasp nests and Argentine ants should be immediately reported to Auckland Council when found on 09-301-0101. When wasps occur on private property it is the responsibility of the property owner to remove them. Pyrethoid dust is recommended for German and common wasps, fly spray is recommended for paper wasps. If you find German wasps on private property we might be able to assist with their removal, contact PFK by visiting www.pestfreekaipatiki.org.nz/contactus.

# PEST TYPES

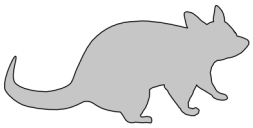
## RATS



Control with:
T-Rex traps/bait stations
Monitor with:
Chew cards/catch rate
Record:
Trap catches/bait station visits in EcoTrack

A total of 140 bait stations and 60 rat traps is estimated to control the rats in all three reserves. One trap or bait station should be placed every 50m. One in three properties around the reserves should also have a rat trap or bait station.

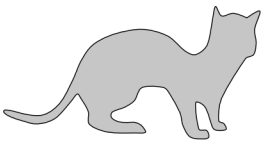
## POSSUMS



Control with:
Timms traps
Monitor with:
Chew cards/catch rate
Record:
Trap catches in EcoTrack

PFK estimates that there would be a need for at least 22 Timms Traps; 5 around Castleton-Reid Reserve, 5 around Ridgewood Reserve, and 15 around Verrans Gully. Traps are available to be borrowed from PFK and can be deployed where sightings have been made.

## STOATS



Control with:
DOC 200 traps
Monitor with:
Catch rate
Record:
Trap catches in EcoTrack

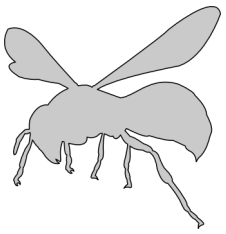
PFK estimates that there would be a need for 5 DOC 200s placed strategically across the Halo to enable control of stoats. These should be deployed where sightings have been made. Ideally placement will include some near the North-east Pony Club. Volunteers are required to set and monitor traps and record catch results in EcoTrack.

## HEDGEHOGS

Control with:
DOC 200 traps
Monitor with:
Catch rate
Record:
Trap catches in EcoTrack

Fifteen DOC 200 traps are estimated to be required to control hedgehogs. These are in addition to those required for stoats. Volunteers are required to set and monitor traps and record catch results in EcoTrack.

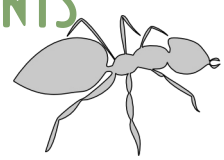
## WASPS



Control with:
Pyrethroid dust/fly spray
Monitor with:
Annual survey in January and ad-hoc sightings
Report:
09-301-0101

Wasp nest in public reserves should be immediately reported to Auckland Council. On private property the recommended method is a pyrethroid in their nest holes (for german and common wasps), or dousing with fly spray (paper wasps). Annual monitoring around January should be undertaken to see if wasp control is required, which is undertaken with VESPEX.

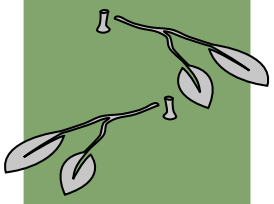
## ARGENTINE ANTS



Control with:
-
Monitor with:
Ad-hoc sightings
Report:
09-301-0101

Argentine ants should be immediately reported to Auckland Council on 09-301-0101. Check potted plants, garden soil and bark, and building materials.

# PEST PLANTS
## GENERAL STRATEGY



### ERADICATE SPECIES IN ORDER OF PRIORITY

All the reserves in Verran Gully Halo were surveyed for the presence and abundance of pest plants. Each plant's abundance was categorized as scarce, occasional or common. Each species has also been given an ecological impact rating of lower, medium or high according to the potential damage that species can have on native wildlife. The abundance and ecological impact of each species in each reserve were considered before designating a priority score. We recommend you search your properties for these weeds too, searching for and eradicating them in the general order they appear in the list to the right.

The priority score indicates an approximate order in which species should be controlled, it ranges from 1 to 7 and has also been colour coded for quick visual reference in the species list table as follows:

| High | | | Priority | | | Low |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

### CONTROL FREQUENCY AND REGROWTH

Whenever any control work is done, it should be checked every 3 months and repeated at least 3 times. Some plants are extremely persistent. If organic control methods are used then it might be necessary to check more frequently. Every 3 to 6 months each area should also be surveyed for re-growth. Seedlings of pests plants that have re-invaded the reserve can be quickly removed again before they become established.

### REPLANT NATIVES IN WINTER

Native species can be replanted during winter to increase their likelihood of survival and establishment. If the area is weed free then natural regeneration of the bush will occur, but areas must be checked to ensure weeds are not re-invading.

### REMOVE LARGE TREES

PFK encourages large tree species to be removed last. When large trees are removed they open up the canopy and can encourage growth of pest plants below. Therefore it is best to remove these species when most other pests have been removed, allowing natives to grow in their place.

### REPORT AND RECORD ON ECOTRACK

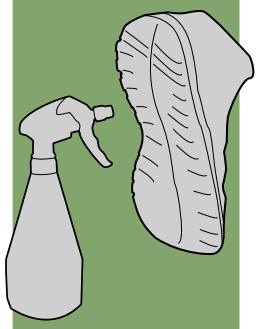
Report any new pest plant observations on EcoTrack, and record control work on EcoTrack. This allows PFK to monitor progress and assist with controlling them. Ecotrack can be downloaded from the Google Play Store or the Apple Store, or by visiting the EcoTrack home page: www.ecotrack.nz

# PLANT SPECIES LIST

*This list was current at the time of writing (2021) and will require updating if weeds re-invade an area or if any are missed during surveys.

| Common name | Abundance (left) \| Ecological Impact (right) \| Priority (colour)<br>Verran Gulley Reserve | Castleton-Reid Reserve | Ridgewood Reserve |
|---|---|---|---|
| Climbing asparagus | Scarce - High | Scarce - High | |
| Elaeagnus | | Scarce - High | |
| Moth plant, kapok vine | | | Scarce - High |
| Golden dewdrop | | | Scarce - High |
| Japanese spindle | Scarce - Medium | Scarce - High | Scarce - Medium |
| Bangalow palm | Scarce - Medium | Scarce - High | |
| Jasmine | Scarce - High | Scarce - High | |
| Kahili ginger, wild ginger | Scarce - High | Common - High | Scarce - High |
| Queen of the night | Scarce - Medium | | Scarce - Medium |
| Cretan brake fern | Scarce - Medium | | Scarce - Medium |
| Woolly nightshade | | Scarce - High | Scarce - Medium |
| White pampas | | | Scarce - Medium |
| Japanese honeysuckle | | | Scarce - High |
| Arum lily | Scarce - Medium | Scarce - High | Scarce - Medium |
| Montbretia | Scarce - Medium | Scarce - Lower | Scarce - Medium |
| Blue spur flower | Scarce - Medium | | Scarce - Medium |
| Chinese privet | Scarce - High | Scarce - High | |
| Velvet groundsel | Scarce - Medium | | |
| English ivy | | Scarce - Medium | Scarce - Medium |
| Monstera | | Scarce - Medium | Scarce - Lower |
| Elephants ear | | Scarce - High | |
| Giant reed | | Scarce - Medium | |
| German ivy | | | Scarce - Medium |
| Periwinkle | | | Scarce - Medium |
| Monkey apple | | Common - High | Scarce - Medium |
| African clubmoss | Scarce - Lower | Scarce - Lower | Scarce - Lower |
| Tradescantia | Occasional - High | Common - Medium | Common - High |
| Agapanthus | Scarce - Medium | | Scarce - Medium |
| Palm lily | Scarce - Lower | | Scarce - Lower |
| Tree privet | Scarce - Medium | | |
| Palm grass | Scarce - Medium | | |
| Loquat | | Scarce - Medium | Scarce - Lower |
| Black wattle | | Occasional - Lower | |
| Fatsia | | Scarce - Medium | |
| Shrub balsam | | Scarce - Medium | |
| Aristea, blue-eyed iris | | | Scarce - Medium |
| Hybrid bindweed | | | Common - Lower |
| Indian shot, canna lily | | | Scarce - Lower |
| Spider plant | | | Scarce - Lower |
| Cotoneaster | | | Scarce - Medium |
| Tuber ladder fern | | | Scarce - Lower |
| Brush wattle | | | Scarce - High |
| Taiwan cherry | | | Scarce - Medium |
| Willow weed | | | Scarce - Lower |
| Yucca, Spanish dagger | Scarce - Lower | | |
| Monterey pine | Scarce - Lower | | Scarce - Lower |
| Blackberry | | Scarce - Medium | Scarce - Lower |
| Water celery | | | Scarce - Lower |
| Mountain pawpaw | | | Scarce - Lower |
| Fairy crassula | | | Scarce - Lower |
| Umbrella sedge | | | Scarce - Lower |
| Hydrangea | | | Scarce - Lower |
| Inkweed | | | Scarce - Lower |
| Gorse | Scarce - Lower | Scarce - Lower | |
| Oldhams bamboo | | Occasional - Lower | |
| Maritime pine | | Occasional - Lower | |
| Kikuyu grass | | | Occasional - Lower |
| Nasturtium | | | Occasional - Lower |

# KAURI DIEBACK
## GENERAL STRATEGY

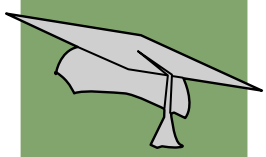


### ALWAYS FOLLOW KAURI HYGIENE RULES

Before going to a reserve clean shoes thoroughly by scrubbing off all dirt. If you are unable to do this at home make sure you scrub shoes before entering the reserve. Then apply sterigene at the cleaning stations. Clean shoes and spray with sterigene after leaving reserves also to reduce the likelihood of carrying kauri dieback spores out of the reserve.

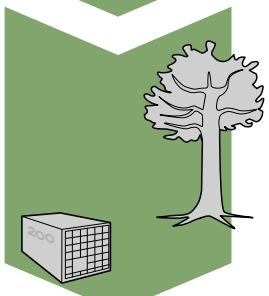
### PLAN WORKING BEES AWAY FROM KAURI

All working bees should be conducted well away from kauri trees to reduce the chances of walking on infected roots or spreading the infection to other trees. If there is work you would like to do close to kauri, please consult PFK for advice before continuing.



### TRAIN NEW VOLUNTEERS IN KAURI CARE

New volunteers that wish to be involved in the restoration of the reserve can be trained in kauri care. PFK runs free workshops in kauri care that volunteers can attend. Workshop times and availability can be found by visiting: www.pestfreekaipatiki.org.nz/kauri-dieback-1



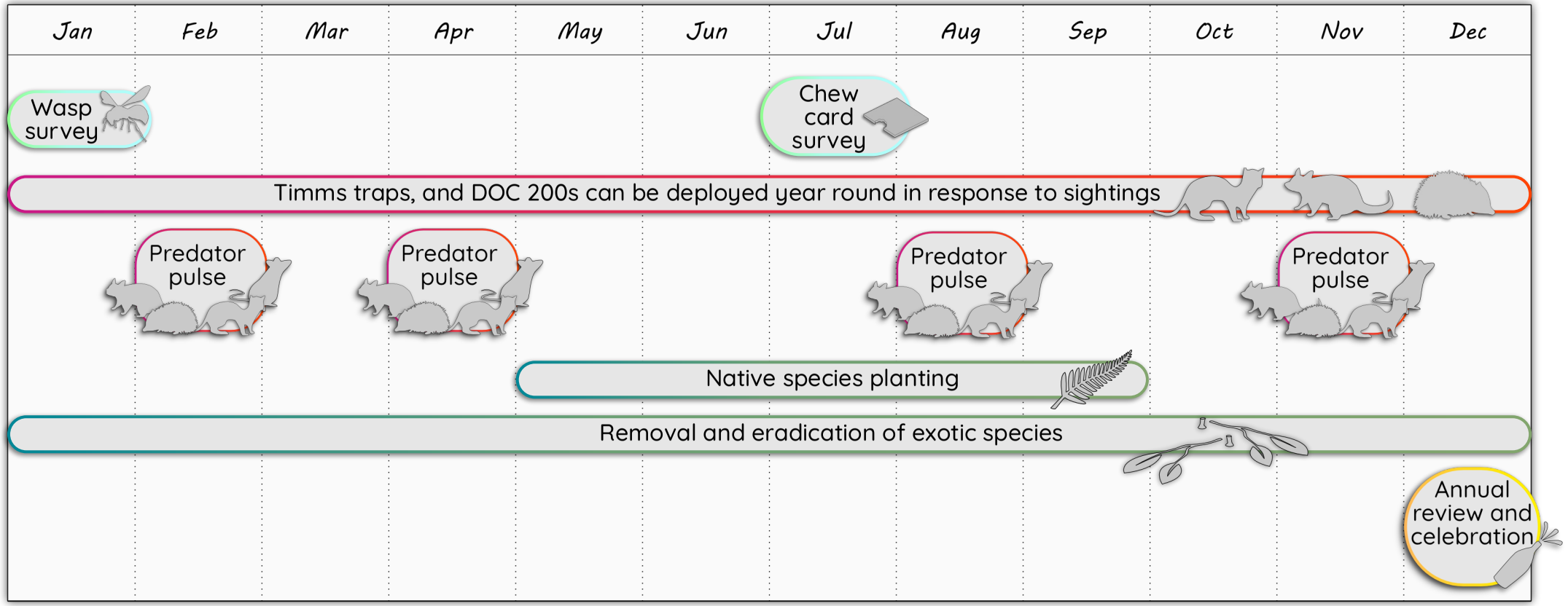
### PLACE TRAP-LINES AROUND KAURI ROOT ZONES

Any new trap-lines that are placed within the reserves should be located away from kauri so that checking them does not require walking over kauri roots.

### MONITOR CLEANING STATIONS

Always check whether cleaning stations have an adequate supply of sterigene when working in the reserves. Individual cleaning stations can be allocated to willing volunteers to ‘adopt’, who can service at regular intervals.

# ANNUAL CALENDAR




Monitoring activities

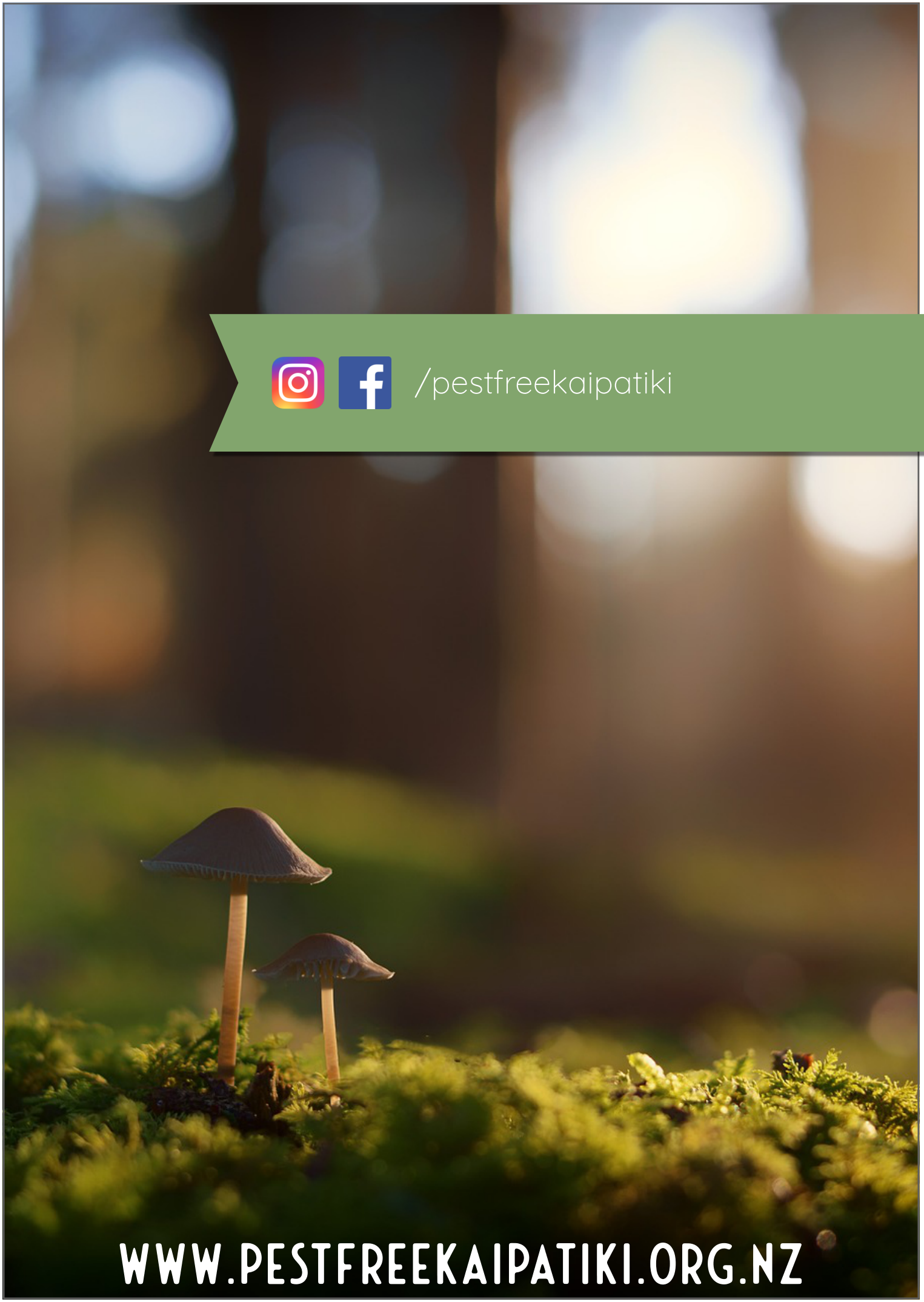
Trapping activities

Planting and weeding activities

Community activities

## INFORMATION ABOUT CONTROLLING PREDATORS

It is very important to pre-feed traps and check bait to make sure it is fresh otherwise this can have negative results. For more information on trapping and how predator pulses work please visit PFK's website (www.pestfreekaipatiki.org.nz).


/pestfreekaipatiki
WWW.PESTFREEKAIPATIKI.ORG.NZ