

Chew Card Monitoring Volunteer Fact Sheet

A Pest Free Kaipātiki Guide to Chew Card Pest Monitoring for Community Volunteers & Citizen Scientists (July 2021)

Key Points

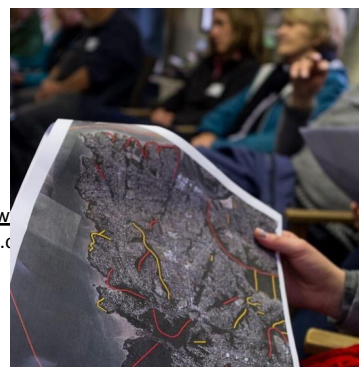
- Survey window open between Saturday 16th July - Friday 29th July 2022.
- Check the weather before you go - try to have a period of 3 days of reasonable weather before you start.
- Cards go out for a total of three nights
- Return your cards (with nails in a separate pack) before Saturday the 6th of August (see collection drop-off points below).
- Health and Safety - be safe - work in pairs.
- Keep kauri safe - scrub your boots well **at home before bush walking**.
- Check your map for locations - make sure you have everything you need before you start.

Background

What is our goal?

The first Chew Card Campaign (now part of Citizen Science) in 2017 established a baseline of the type and approximate numbers of predators in Kaipātiki. Knowing this helps us better plan our overall pest control strategy for the area. Starting with reserves and parks overtime, we hope to learn what areas need the most predator traps and bait stations. Dr Craig Bishop and the RIMU team (Research and Evaluation Unit, Auckland Council) have mapped out the scientifically accurate monitoring lines throughout Kaipātiki.

Every year, the community are invited to help with this exercise as it is a fun way to learn about ecology and pest control strategies, which is where Pest Free Kaipātiki and YOU come into the equation.



*Left: Volunteers at a PFK Chew Card Volunteering Session, July 2017;
Right: Left: Maps showing monitoring lines*

About Chew Card Monitoring

Chew cards provide a useful means of monitoring pest presence and changes in pest populations over time. They help identify what kinds of predators you have and are also useful for estimating the *relative abundance* of a species in any given area. As this changes over time with each successive monitoring, they provide a useful way to track the effect of predator control by community groups.

Chew cards are 9x18cm plastic corflute cards filled with a non-toxic peanut butter-based paste which predators find irresistible. Rats, mice, possums and even hedgehogs, mustelids and cats make distinctive bite marks on the cards. They are folded over and nailed to a tree at approximately 30cm above ground, so predators can reach them easily.



*Left: Example of correct chew card placement.
Right: the different bite marks
/ Photos: NZ Landcare Trust.*

Chew cards are left out for three consecutive nights and then collected to analyse the different bite marks. If they are left out for longer, they can be chewed up completely, making it difficult to identify the predator responsible.

Health & Safety

Pest Free Kaipātiki are concerned for YOUR health and safety. We will be following Auckland Council H&S guidelines. To ensure you are not at risk you **MUST** comply with the following...

- Please work in pairs, rather than splitting chew cards between you, for safety. The weather we have may mean the ground will be slippery, so take extra care.
- If a tag is difficult to reach because of steep terrain – ie. requires access via a steep slope, please use your common sense and place the chew card at a safer location, to prevent risk of injury.

- All accidents and any injuries should be recorded and emailed to enquiries@pestfreekaipatiki.org.nz - this includes all accidents, whether requiring medical treatment or not.
- If you see a problem in the bush (eg wasps, dangerously fallen tree, broken boardwalk), please report it immediately to the Auckland Council contact centre (09)301-0101 giving a precise location (eg “about 300 metres down track entrance at 251 Hinemoa Street”) and clear details of the problem. If non-urgent, email clear location and details to info@aucklandcouncil.govt.nz preferably with relevant photos (copy the email to enquiries@pestfreekaipatiki.org.nz).

What you need to know before you begin

What you will be given or will collect a chew card pack during the Citizen Science 2022 Drop in session (18th June 2021 between 10am and 1pm at the PFK HQ at 3 Ross Avenue, Glenfield)

Volunteers allocated to a reserve will be given:

1 x zip-lock plastic bag containing:

- A bag of pre-pasted chew cards
- A bag of nails (two sizes)
- A satellite GIS map (Auckland Council map system) of the reserve showing locations of monitoring stations (trees)
- And a spreadsheet of locations with GPS coordinates (LAT LONG) and the tag reference

e.g.

Line #	Reserve	Distance (m)	Common name	Scientific Name	DBH	Easting	Northing	Latitude	Longitude	Tag #
23	Castleton Reid Reserve	0	Kahikatea	Dacrycarpus dacrydioides	17.7	1752758	5925773	-36.80155534	174.7123322	AE8016
23	Castleton Reid Reserve	20	Totara	Podocarpus totara	41.4	1752758	5925748	-36.80178061	174.7123372	AE8121

note: DBH = diameter at breast height

Closed tracks due to kauri dieback protection have been excluded from the 2021 survey. Always wash and scrub your boots until no visible soil remains **at home before you bush walk**. Do this in a tub with the water going to the sewer, not the stormwater system. In addition you MAY also be given:

- A bottle of Sterigene (kauri dieback boot spray)
- Plastic gloves (to use when collecting the chewed cards)

How to read GPS coordinates

GPS coordinates The RIMU maps show coordinates in NZTM GPS format which is what you will use if you have a handheld GPS reader. However if you are going to use Google maps in a phone, you will need the latitude/longitude (LAT/LONG) coordinates.).

If you intend to use a smartphone and Google maps: you will need the LAT/LONG coordinate format (eg-36.813028, 174.732556) instead of the NZTM format. Simply enter the latitude, followed by a comma and then the longitude coordinates into the search address bar in google maps and it will direct you to the chew card location. Don't forget to use the 'minus sign' on the LAT number! Searching for your very first point is useful to do at home on your phone and saving it's location. Makes it easier to get started on the day.

If you have a handheld GPS unit (e.g Garmin brand) – you will have a function to input the coordinates (eg 5924258, 1754993 from your excel spreadsheet) manually into the GPS unit. Use your GPS function to guide you to your first point and chew card location.

To prepare

1. Familiarise yourself with the reserve you have been allocated. The locations on the map will have a number allocated to them (i.e 20m) , and will match a specific chew card in the pack you received. Your card for example may read: *L23, 0m* or *L23, 20m*. L23 stands for the Line # of Castleton Reid Reserve.
2. View your spreadsheet, check your GPS coordinate is in a format suited to the equipment you have (see GPS use above).
3. Prepare a pack for use when a clear spell of weather is predicted:
 - a hammer
 - chew card bag
 - nails (in a separate bag)
 - map and spreadsheet
 - a smartphone with Google maps or a handheld GPS
 - appropriate footwear and clothing for your bush walk
 - consider a pair of gloves for the collection 3 days later (after all the cards will be ratty).

Steps for Chew Card placement and retrieval

Preventing Kauri Dieback Disease

Sterigene (aka Trigene) spray for Kauri Dieback disease: If you are going to be working in a reserve with kauri trees - we will need to ensure that we all have clean footwear to prevent spread of Kauri Dieback disease. It is easiest and most hygienic to scrub your shoes at home in a laundry sink where the dirty water will go down into the sewer system. Depending on your monitoring line, you may be given Sterigene to spray on your boots as well.

In the reserve

1. Use your GPS to walk to your first location. Check your excel spreadsheet for 'clues' of what tree is intended to host the chew card for example a 'Totara'. It should be marked with a

double band of pink and black tape (or blue tape) around chest height, may be a specific tree species, or have a small metal numerical tag. It may be possible these have been vandalised or removed, so if you can't find the exact tree, don't stress - choose a suitable one near the coordinate and make a note on your sheet. The most important thing is that all your cards go out, approximately 20m apart along the line. This is where a buddy comes in handy!

2. Fold your card in half. Push your flat head nail through the centre of the front piece, approximately 1cm down from the fold. On the second side, push it through approx 0.5cm from the fold. Hammer in place 30cm from the ground (approximate length of a hammer), at roughly a 45 degree angle. This holds the card open for easy access to both sides of the lure.

3. Move onto your next location using GPS guidance. Complete your line. Enjoy your walk out...

4. Collect in after three nights, making sure to collect nails but store in a separate bag from the chew cards (we don't want false mouse marks!). Wear gloves.

5. Remember to write the date you put the chew cards out on the chew card ziplock bag.



Photo: Ronan Whyte setting out chew cards / Photo: Kaipatiki Project.

Collection dates and drop off

After your chew cards have been set up for three nights and you have collected them up again, we'd like you to **return them by 6th August 2021.**

Pest Free Kaipatiki Office - PFK HQ, 3 Ross Avenue, Glenfield (the Chew Card Drop Box will be just outside the door of the office)

Sharing the Results

We plan to have a follow up Volunteer session to review the results. This date is yet to be confirmed, but will likely be approximately two weeks after the final return date and emailed out to you in an invitation. This will be an opportunity to analyse the data as a group and provide an opportunity for you to meet the other chew card volunteers over a cuppa.

Thank you to our supporters!



Bringing the birds back to Kaipātiki / Photo: Pam Templeton

We couldn't produce this useful data, and the subsequent protection of biodiversity without the help of the community (yes that's you!) and our various supporters. Together we hope to give the birds a fighting chance and return birdsong to our wonderful bush-clad Kaipātiki area.



Contact info

For more information email enquiries@pestfreekaipatiki.org.nz and don't forget to join [Pest Free Kaipātiki on Facebook!](#)