

Applying Behavioural Insights to Increase Uptake of a Pest Plant Control Service

September 2021

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Auckland Council

Background

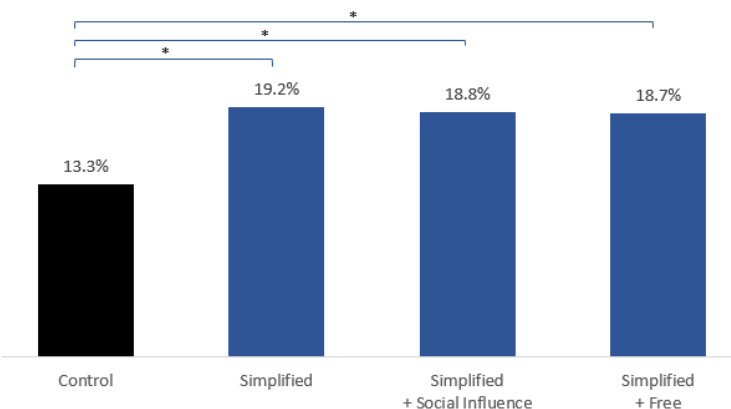
The Auckland Regional Pest Management Plan 2020 requires high ecological value parkland and surrounding properties to be free of particular pest plant species. A free pest plant control service is offered by Auckland Council to enable Aucklanders to begin controlling pest plants on their property. In previous years this service has had lower than desired uptake. The objective of this trial was to increase uptake of the service through the application of behavioural insights to invitation letters.

Method

Three new behaviourally-informed letters were developed advertising the pest plant control service and a randomised controlled trial (RCT) was run to determine which most effectively encouraged uptake of the service. The three letters (described on subsequent pages) focused on 'simplifying' language and making the design more eye-catching, using 'social influence' messages, and highlighting the free nature of the service. A fourth letter, similar to that sent out in 2019, was used as a control against which to compare the new letters.

Properties that qualified for the service were randomly allocated one of four letter versions inviting them to book the service and responses were tracked. A total of 5191 letters were posted in October 2020 comprising 2782 properties. Properties with different physical and mailing addresses were sent two letters; one to each address. A pamphlet with details about pest plants, their management and the Pest Free Auckland initiative, and a Pest Free Auckland sticker were included with the letter.

Results



*Difference significant at $p < 0.05$.

In total, 486 of the properties included in the trial (17.5%) booked a service or contacted the pest plant control supplier.

The new behaviourally-informed letters all had significantly greater proportions of service bookings or making contact with the supplier compared with the control letter. No significant differences were found between the three new letters. The 'Simplified' letter had the greatest overall proportion of bookings or supplier contact at 19 per cent.

Recommendations

1. Use the 'Simplified' treatment letter as a template for future delivery of this service.
2. Letters were all posted on the same day resulting in suppliers being overwhelmed and unable to respond to all booking enquires. Staggering the posting of letters and offering a self-service online booking system may further increase service uptake.
3. Map out the end-to-end customer journey through the service and apply behavioural insights throughout to further increase service uptake.

[Redacted]

08-Oct-20

Dear [Redacted],

Due to the high ecological value of the areas in and around Karekare increased resourcing has been allocated to protect this area from pest plants.

To assist residents and ensure target species are effectively managed throughout Karekare between today and 31st March 2021, you qualify for initial control of any amount of climbing asparagus, bushy asparagus, ginger, moth plant, woolly nightshade and rhamnus at no cost to you. If you would like to book no-cost control, please contact [Redacted] by phoning [Redacted] or by emailing [Redacted]@xtra.co.nz.

Where necessary, to prevent root stock or tubers re-sprouting, a small amount of herbicide will be applied to the stump.

If you have any queries or concerns about this programme, please do not hesitate to contact me by phoning [Redacted] or by emailing [Redacted]@aucklandcouncil.govt.nz.

Regards,
[Redacted]
Conservation Advisor - West

¹ No-cost pest plant control booked after 31st March can only be done if funds and staff time allow.

² No-cost pest plant control booked after 31st March can only be done if funds and staff time allow.

DR NO-COST WEED CONTROL

und your neighbourhood, you are eligible for no-cost asparagus, ginger, moth plant, woolly nightshade and s book this control, staff will control target pest plants yourself, regardless of the quantity of the pest plant

rol on your property, please contact [Redacted] by 31st March 2021².

in Advisor for the Waitākere Ranges area.

aucklandcouncil.govt.nz

Control letter

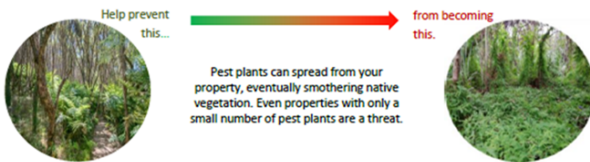
The control letter was based on a letter used in a previous year.

[Redacted]

Dear Piha resident,

Your household is part of a zone to protect parks around Piha driven by Auckland's new Regional Pest Management Plan. In addition to council controlling pest plants in the park areas, you and your neighbours will form a line of defence preventing pest plants from entering parks around Piha and killing the native plants.

Why is this important?



Book your pest plant control service now!

We are pleased to let you know that as a resident of this zone you qualify for a free, initial service to control the worst pest plants in your area. This service is designed to make it easier for you to prevent these pest plants re-establishing on your property.

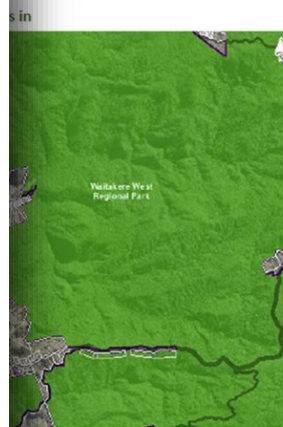
After you book, a pest plant specialist will visit to identify what pest plants you have on your property. They will ensure the worst plants (i.e. climbing asparagus, bushy asparagus, ginger, moth plant, woolly nightshade and rhamnus) are dealt with by carefully applying herbicide.

If you don't book the pest plant control service above, you will be required by the Regional Pest Management Plan to control all pest plants on your property, at your own cost.

How to book your pest plant control service

Your pest plant control service is being run by [Redacted] Book your appointment by contacting [Redacted] using the contact details below:

Phone or text: [Redacted] Email: [Redacted]@[Redacted].co.nz



Map data by OpenStreetMap contributors, Imagery © Mapbox

on the previous page. If you have any questions opening in your area, feel free to contact:

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so this, including:

council is helping Aucklanders manage pest plants. ly required to do so, and where required, approved council or communications to ensure they are encouraging uptake of

'Simplified' letter

This redesigned letter used the following to encourage recipients to read and act on the contents:

- Simplified language
- Use of headings to break the letter up
- Inclusion of a clear call to action
- Use of colour and images to draw attention
- Personalisation through the use of recipients' names and a map showing their property within the buffer zone
- Clear information on how to book.

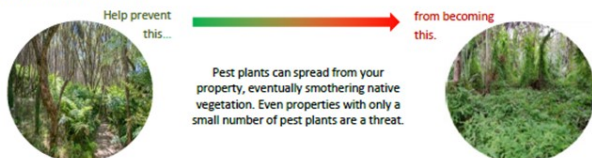
Join your neighbours in protecting parks around Piha

"We live on the doorstep of a regional park. We need to protect it. It is a great service with no cost! Why wouldn't anyone choose to book in the service?"
- David, Recipient of Pest Plant Control Service

Dear Piha resident,

Your household is part of a zone to protect parks around Piha, driven by Auckland's new Regional Pest Management Plan. In addition to council controlling pest plants in the park areas, you and your neighbours will form a line of defence preventing pest plants from entering parks around Piha and killing the native plants in the area. Please join your neighbours in protecting your local bush.

Why is this important?



Pest plants can spread from your property, eventually smothering native vegetation. Even properties with only a small number of pest plants are a threat.

Book your pest plant control service now!

We are pleased to let you know that as a resident of this zone you qualify for a free, initial service to control the worst pest plants in your area. This service is designed to make it easier for you to prevent these pest plants re-establishing on your property.

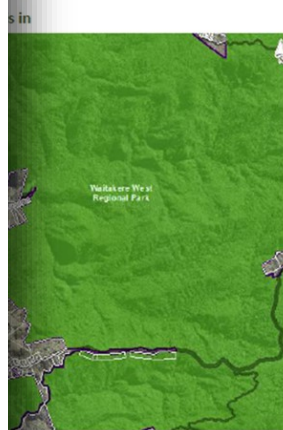
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Phone or text: [redacted] @ Email: [redacted]



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'Social influence' letter

This redesigned letter was the same as the 'Simplified' letter, but also included:

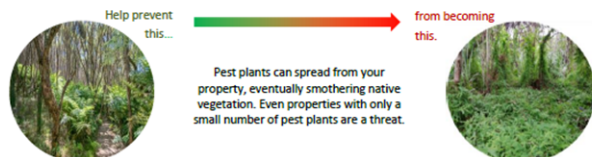
- A message encouraging recipients to 'join their neighbours' and a quote from a resident who had booked a similar service in 2019.

You have been chosen to receive a FREE, LIMITED-TIME pest plant control service

Dear Piha resident,

Your household is part of a zone to protect parks around Piha, driven by Auckland's new Regional Pest Management Plan. In addition to council controlling pest plants in the park areas, you and your neighbours will form a line of defence preventing pest plants from entering parks around Piha and killing the native plants in the area.

Why is this important?



Pest plants can spread from your property, eventually smothering native vegetation. Even properties with only a small number of pest plants are a threat.

Book your FREE pest plant control service now!

We are pleased to let you know that as a resident of this zone you qualify for a free, initial service to control the worst pest plants in your area. This service is designed to make it easier for you to prevent these pest plants re-establishing on your property.

After you book, a pest plant specialist will visit to identify what pest plants you have on your property. They will ensure the worst plants (i.e. climbing asparagus, bushy asparagus, ginger, moth plant, woolly nightshade and rhhamnus) are dealt with by carefully applying herbicide.

If you don't book the pest plant control service above, you will be required by the Regional Pest Management Plan to control all pest plants on your property, at your own cost.

How to book your free pest plant control service

Your pest plant control service is being run by [redacted] Book your appointment by contacting [redacted] below:

Phone or text: [redacted] @ Email: [redacted]



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'Free' letter

This redesigned letter was the same as the 'Simplified' letter, but also included:

- A message highlighting the free and limited-time nature of the service.

More details about the pest plant control service

Which properties qualified for the service?

The Auckland Regional Pest Management Plan (RPMP) 2020-2030 describes in section 7.5.2 that properties within a 500m buffer of high ecological value parkland are required to undertake pest plant management. In 2020 (the first year the RPMP was operational) properties directly bordering parkland in selected areas were eligible for a free initial service to control pest plants on private properties. In subsequent years as the species specific rules outlined in the RPMP are operationalised more properties will become eligible and be offered this service.

What are the goals of this service?

This control service forms one component of a larger project enabling landowners to undertake pest plant management within the buffer zone. The project contributes to Pest Free Auckland 2050 which aims to eradicate pest species, restore and connect native ecosystems, and to tell stories of community action.

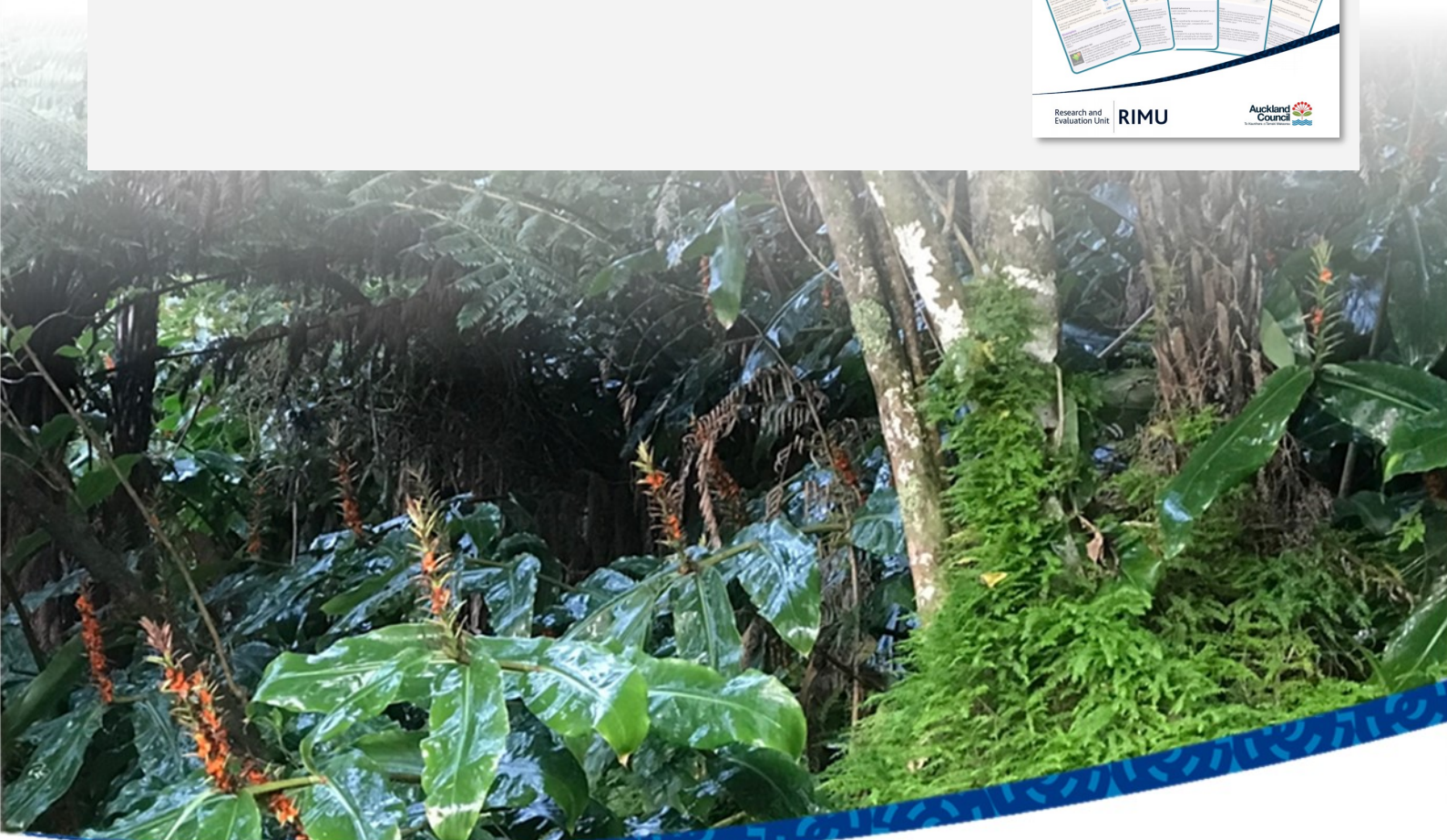
What are the next steps?

The simplified version of the letter will be used in the service delivery in 2021 and subsequent years.

What are behavioural insights?

Behavioural insights (BI) involves the study of human behaviour, often drawing on empirical research in fields including psychology, economics and sociology. By helping to identify the behavioural factors and biases affecting people's choices, BI enables the design of more effective programmes and policies.

Check out the [Behavioural Insights Toolkit](#) for a step-by-step process to create your own behavioural intervention.



This research project (02-2020) received ethical review from Auckland Council's Human Participants Ethics Committee.

Find out more: phone 09 301 0101,
email rimu@ AucklandCouncil.govt.nz or visit
AucklandCouncil.govt.nz and knowledgeAuckland.org.nz