

# Dogs and Kiwi – A Randomised Control Trial of Messaging Options



Manaaki Whenua  
Landcare Research

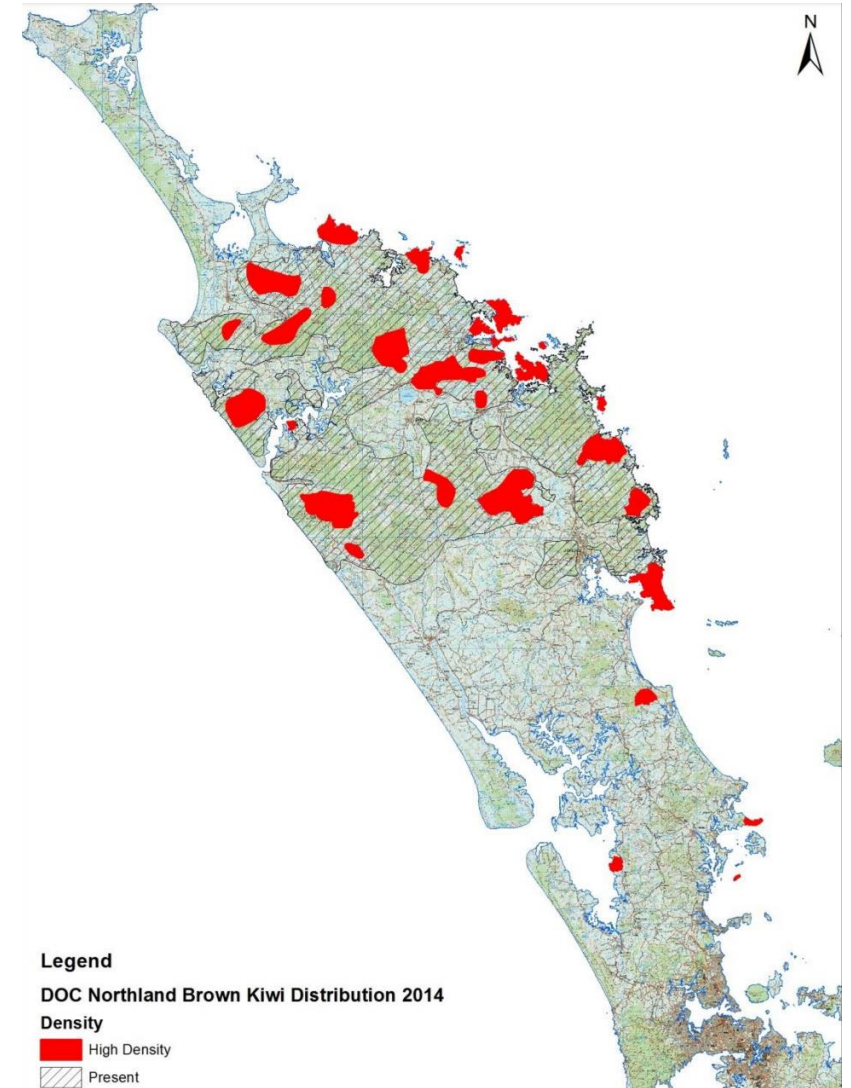
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# Uncontrolled dogs - threats to kiwi and other native birds

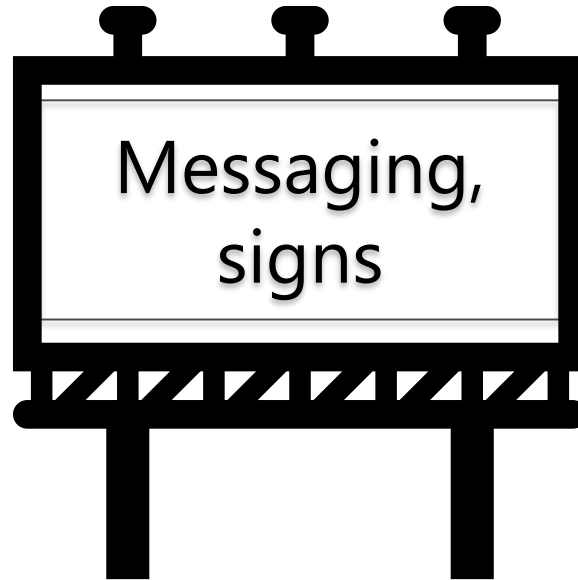
## Especially in Northland





# Want to target behavioural change

Common conservation tactic – spread awareness









# Messages widely deployed



- BUT, still see a lot of violations.





# Do these messages work?

Do dog owners respond to conservation messages?

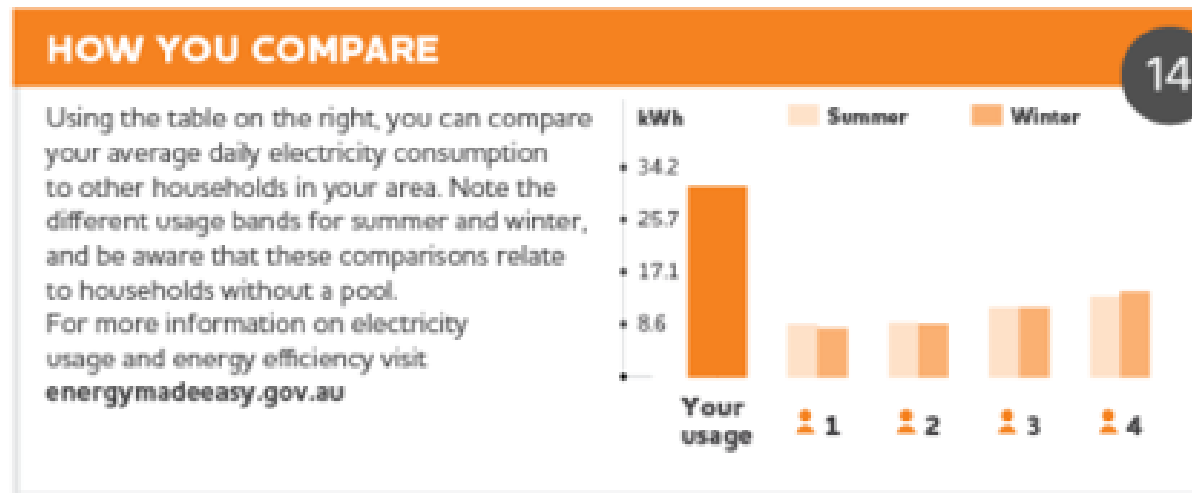
Can we make them work better?

Can we get the same outcome by asking different messages?



Growing popularity of behavioural approaches to achieve outcomes.

## Compare to neighbours on electricity bill





## Social pressure as motivation





# **FNDC Collaboration on dog registration**



Partnered with **Far North District Council**.

Annual dog registration reminders

Mailed out to previous dog owners, new dog owners, suspected dog owners.

Current registration rates: 60-70%



**Far North  
District Council**

# Dog Control Bylaw Going on at the time



stuff

auckland

## 'Draconian' dog controls anger canine lovers

Bayley Moor · 08:56, Aug 11 2017



BAYLEY MOOR/STUFF

Jan Graham says the community should have been more involved during changes to the proposed Dog Control Bylaw. She is pictured at the Waitotara Reserve with her five-year-old blue heeler named Pearl.

### Bay of Islands Dog Owners Group

LOBBYING FOR DOG OWNERS AND OUR FURRY FRIENDS

ABOUT

NEWS

EVENTS

RESO

## About

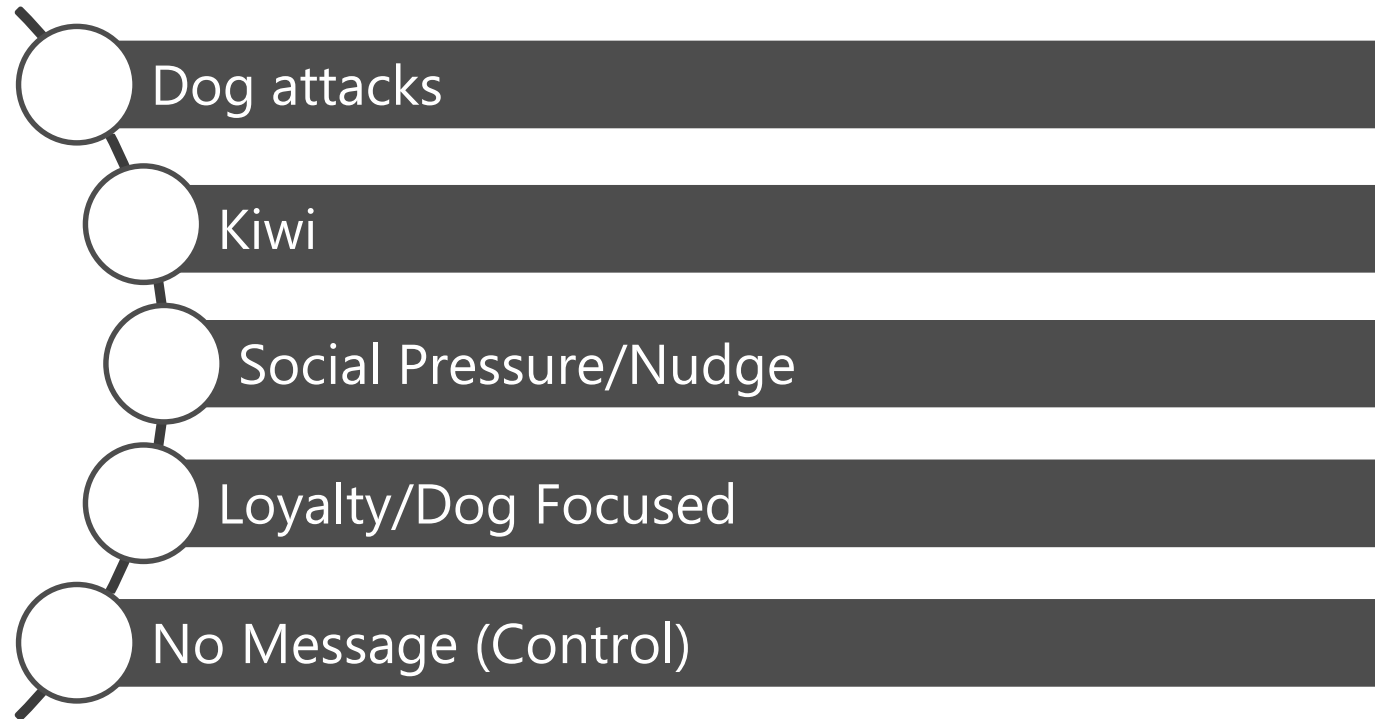
Started in August, 2017, to protest against a hostile Dog Control By-law being promoted by the Far North District Council.

The Group began as a spontaneous Facebook group called The BOI WatchDog, in response to a threat to phase out pets in the Russell Peninsular and forbid dog exercise anywhere on public land or beaches on the Russell side of the Walkare Inlet.

The campaign was immediately widened to include groups from Opua, Paihia and Kerikeri and within a few weeks had attracted many hundreds of members from all over the Far North District.

# Randomise messages over people

Design 4 different messages, in cooperation with FNDC.



You live near an area  
inhabited by kiwi.

Knowing the number of nearby  
dogs will help to plan kiwi  
protection activities.

Please register your dog(s)  
using the enclosed form to  
help with kiwi protection.





Dog attacks are a concern for our community, especially in areas with children, elderly residents, and vulnerable wildlife.

Knowing where dogs are helps prevent attacks and improves council planning efforts.

**Please register your dog(s) using the enclosed form.**



# Dog attacks



Your dog is loyal to you.

Please register and microchip  
it to return the same loyalty.

If lost, your registered and  
microchipped dog will be  
returned to you much quicker.

**Please register your dog(s)  
using the enclosed form.**



# Loyalty



# Nudge/behavioural



Please register your dog(s)  
using the enclosed form.

Nearly 8 out of 10 dogs in  
the Far North District whose  
owners receive this form are  
registered before penalties  
are applied.







Messages sent out June 2018.

Results trickled in throughout year.



# Registration Data

6,271 Owner-level observations

Anonymised – Lawyers denied anything connecting to owner

## Most Popular Dog Names

Max

Bella

Jess

Jack

Poppy

Sam

Molly

Buddy

# Controls



Different effect across groups?

**Don't have** Census data.

We DO have: Previous Year Registration Rates (maybe represent income?)

Look at average 2018 registration rate of zip code (ID)

Split into fourths. Test significance of differences

- I.e., look at people in the zip codes with the lowest registration rates.



# Results



# Kiwi Messages

## Differences in Probability of Registration

Zip Code Quartile	Kiwi Message	Predicted Percent
1	No	60.30
1	Yes	64.97

**Dog owners in the lowest registration areas that get a message are more likely to register**

**- 5 percentage points!**



# Kiwi Messages

## Differences in Probability of Registration

Zip Code Quartile	Kiwi Message	Predicted Percent
1	No	60.30
1	Yes	64.97
2	No	73.25
2	Yes	73.65
3	No	75.00
3	Yes	79.61
4	No	81.96
4	Yes	75.40

Dog Control  
Bylaw effect?  
Russel?



# Dog Attack – Similar story.

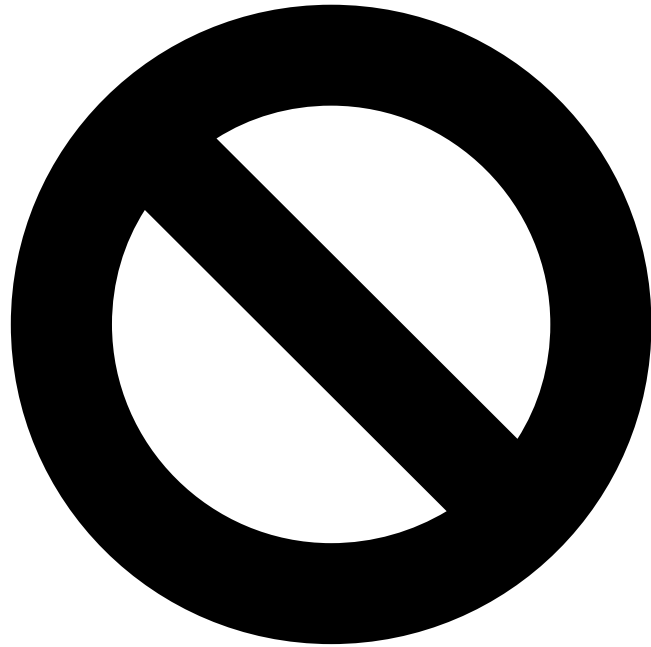
Zip Code Quartile	Dog Attack Message	Predicted Percent
1	No	60.55
1	Yes	63.66
2	No	73.28
2	Yes	73.49
3	No	75.03
3	Yes	79.43
4	No	82.19
4	Yes	74.29

# Social Pressure/Nudge



No effect!

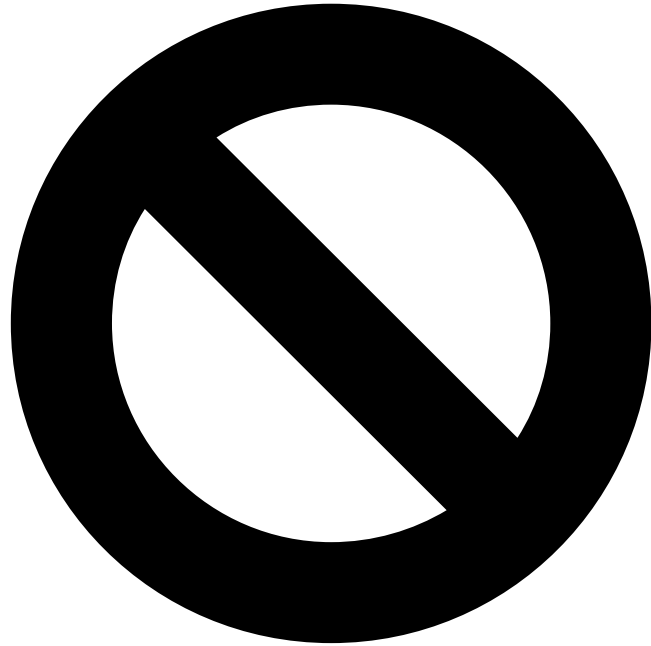
Contrary to previous sustainability studies





# Loyalty Message

No significant effect



# Segmentation - Pig Dog Owners



Message	Number	Mean
<b>Control</b>	<b>52</b>	<b>50.0</b>
Dog Attack	27	55.6
Kiwi	27	77.8
Social Nudge	29	55.2
Loyalty	36	55.6

# Segmentation - Working Dogs



Message	Number	Mean
<b>Control</b>	<b>348</b>	<b>81.3</b>
Dog Attack	193	85.0
Kiwi	221	79.6
Social Nudge	210	81.4
Loyalty	218	80.7



# Conclusions

Some messages are much more effective with dog owners, on average

- Kiwi message
- Dog attack message

Social pressure/nudge approach has **no significant effect**

Loyalty message – **no significant effect**

# Conclusions



Definite segmentation found!

- Kiwi message very persuasive with pig dog owners
  - NOT with working dog owners
- Dog attack message – working dog owners.
- Definitely want to tailor messaging/signs to local population.