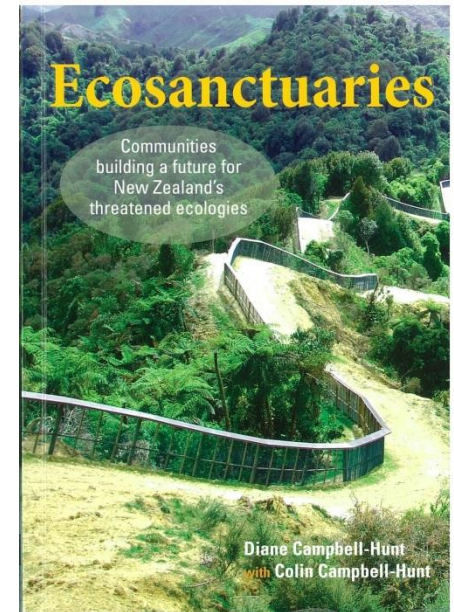# 13ᵗʰ Sanctuary Workshop: Hamilton

Ark in the Park 2015

John Innes
Landcare Research
HAMILTON

Wed. 17 August 2016

Previous workshops

- 2004 Maungatautari
- 2005 Tawharanui
- 2006 Te Kauri
- 2007 Silverstream (Zealandia)
- 2008 Wanganui (Bushy Park)
- 2009 Havelock North (Kidnappers)
- 2010 Great Barrier Island (Glenfern, Windy Hill)
- 2011 Nelson (Rotoiti, Brook)
- 2012 Taranaki (Rotokare)
- 2013 Shakespear
- 2014 Dunedin (Orokonui)
- 2015 Auckland (Ark in the Park)
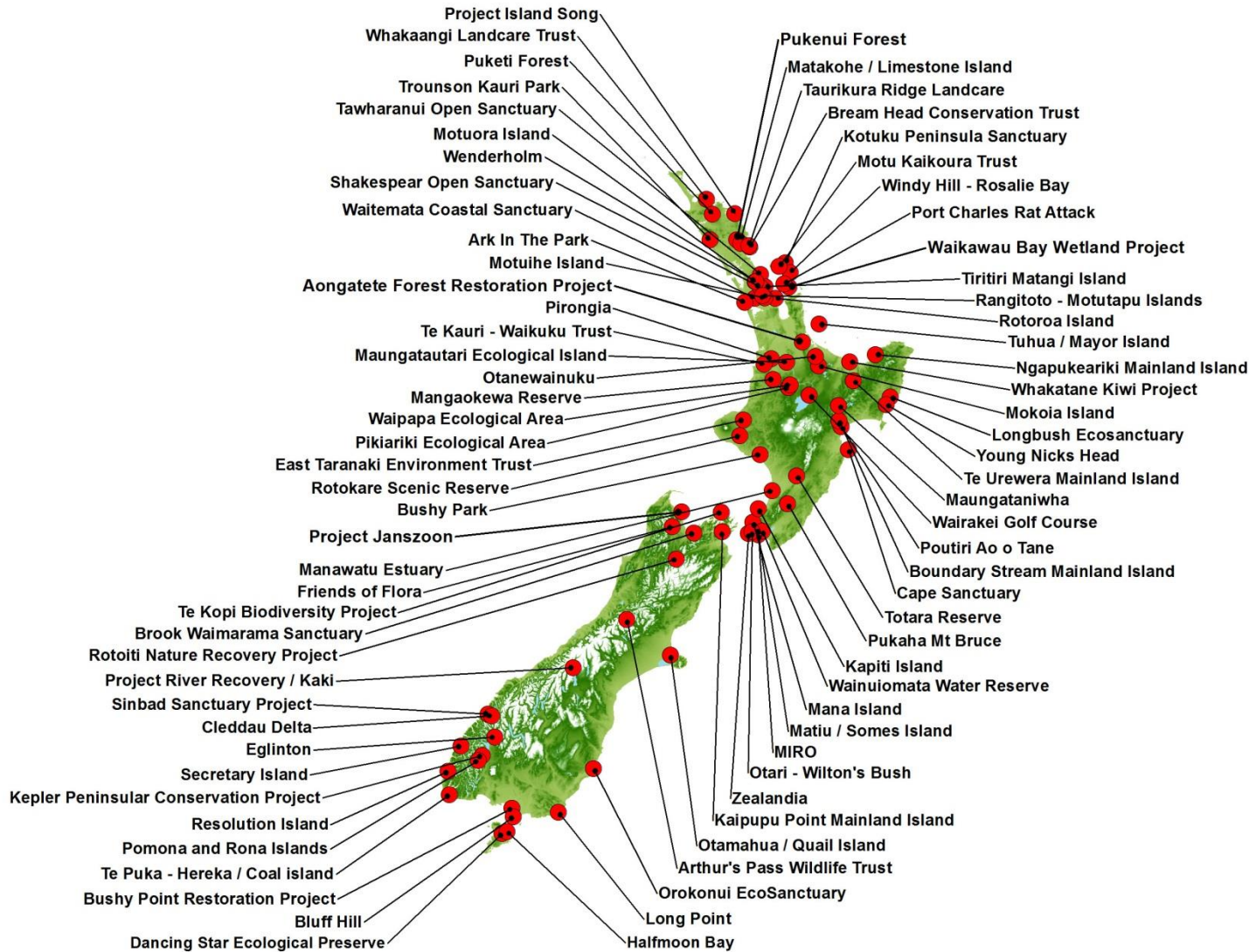
- 2016 Hamilton (Maungatautari)

Kidnappers2009

What are 'biodiversity sanctuaries'?

Sites that:

- experimentally restore NZ ecosystems to indigenous dominance and full species complement

- control or eradicate a broad suite of pests with best practice techniques

- reintroduce missing species

- manage a permanent and substantial risk of pest reinvasion

- inspire and galvanise communities to local conservation

We identified 73 such projects on or near the NZ mainland

SANCTUARIES

Project Island Song
Whakaangi Landcare Trust
Puketi Forest
Trounson Kauri Park
Tawharanui Open Sanctuary
Motuora Island
Wenderholm
Shakespear Open Sanctuary
Waitemata Coastal Sanctuary
Ark In The Park
Motuihe Island
Aongatete Forest Restoration Project
Pirongia
Te Kauri - Waikuku Trust
Maungatautari Ecological Island
Otanewainuku
Mangaokewa Reserve
Waipapa Ecological Area
Pikiariki Ecological Area
East Taranaki Environment Trust
Rotokare Scenic Reserve
Bushy Park
Project Janszoon
Manawatu Estuary
Friends of Flora
Te Kopi Biodiversity Project
Brook Waimarama Sanctuary
Rotoiti Nature Recovery Project
Project River Recovery / Kaki
Sinbad Sanctuary Project
Cleddau Delta
Eglinton
Secretary Island
Kepler Peninsular Conservation Project
Resolution Island
Pomona and Rona Islands
Te Puka - Hereka / Coal island
Bushy Point Restoration Project
Bluff Hill
Dancing Star Ecological Preserve

Pukenui Forest
Matakohe / Limestone Island
Taurikura Ridge Landcare
Bream Head Conservation Trust
Kotuku Peninsula Sanctuary
Motu Kaikoura Trust
Windy Hill - Rosalie Bay
Port Charles Rat Attack
Waikawau Bay Wetland Project
Tiritiri Matangi Island
Rangitoto - Motutapu Islands
Rotoroa Island
Tuhua / Mayor Island
Ngapukeariki Mainland Island
Whakatane Kiwi Project
Mokoia Island
Longbush Ecosanctuary
Young Nicks Head
Te Urewera Mainland Island
Maungataniwha
Wairakei Golf Course
Poutiri Ao o Tane
Boundary Stream Mainland Island
Cape Sanctuary
Totara Reserve
Pukaha Mt Bruce
Kapiti Island
Wainuiomata Water Reserve
Mana Island
Matiu / Somes Island
MIRO
Otari - Wilton's Bush
Zealandia
Kaipupu Point Mainland Island
Otamahua / Quail Island
Arthur's Pass Wildlife Trust
Orokonui EcoSanctuary
Long Point
Halfmoon Bay

Map: Neil Fitzgerald, 1 Sept. 2014

Who do you represent or work for? (n=29)

	%
Biodiversity sanctuary	55
A company	14
Government agency	4
Private individual	10
Other (Trust, Univ., NGO)	17

How well do you understand the relative roles of Landcare Research and SONZI? (n=27)

Very well		%		Not at all
67	22	4	7	0

How many of the 12 past workshops have you attended? (n=27)

0	1	2	3	4	5	6	7	8	9	10	11	12
4	3	3	3	4	2	2	4	0	1	0	1	0

What did you like most about the workshops? (n=23)

Networking	Research	Field trip	Beer
86%	56%	17%	9%

What did you like most?

Interacting with people from other sanctuaries with shared challenges.

The beer at night – when we could. Lots of technical stuff was helpful, but for me it is really about meeting the people I have only emailed etc and learning from them.

Learning about shared problems (biological and political) and ways to deal with them.

Developing relationships between sanctuaries, especially over time. Latest research. Field trips.

Information about new developments and results of research that is focused on operational aspects of sanctuaries (has a direct practical application).

How you felt about workshop aspects (n=22)

	Happy	%	Unhappy
Venue	64	36	0
Month	68	27	4
Duration	86	14	0
Midweek	82	18	0

Satisfaction with workshop format (n=22)

	Not worthwhile					<->		Essential		
1 day science talks	1	0	0	1	1	1	2	1	0	15
½ day SONZI business	1	1	0	0	5	1	2	3	2	7
Soapbox session	1	0	0	0	2	0	1	5	2	11
½ day field trip	1	0	0	0	2	1	4	5	2	7

Format comments

Science presentations
- Too many presentations seemed of work planned or in a preliminary stage. Ideally science and SONZI priorities would be more linked.
- Possibly a choice of the commercial industry as that could be beneficial to others...

SONZI 1/2 day
- Possibly increase SONZI-focused component of overall workshop. Choose a specific focus or two relevant to most sanctuaries e.g. enviro-ed., latest trapping info
- Possibly some commercial aspects as they drive the technology and $$$

Soapbox session
- Damn good– but need much more time
- Putting these on morning of last day limits opportunity for others to follow up with the soapbox speakers

Afternoon field trip
- Supply beer – hard to answer as each location is different
- These are good if I haven't been somewhere before, but most people attending have probably already seen a range of sanctuaries.
- The field trip is an extension of the informal network time more than about the site *per se*. Field trip organisers should reflect this and not be quite so ambitious to cram so much in.

Would you like a third day added? (n=22)

YES	NO
64%	36%

If there was a third day, what would you like included? (n=13)

Sanctuary issues*	More soapbox	Training & workshops	More beer
8	3	2	1

*education, volunteering, funding, community engagement, governance, management, marketing, national networking, volunteers, H & S, rewards, recruiting…

Further comments? (n=9)

- Generally nice things about Landcare Research involvement

- I know you have to try and keep the cost down but it would be really good if we didn't have to go offsite for a beer and conversations – this is the time that I personally get the most out of the trip, but I also get to know these people a lot more than just chatting over lunch etc

- The low cost to participants by using the type of venue as per past is great – encourages participation at low cost

- The biggest issue for me is not being informed of the upcoming meeting times (& programme) well enough in advance

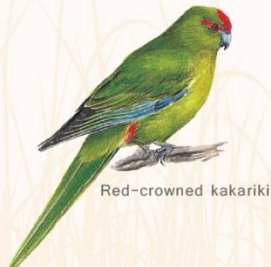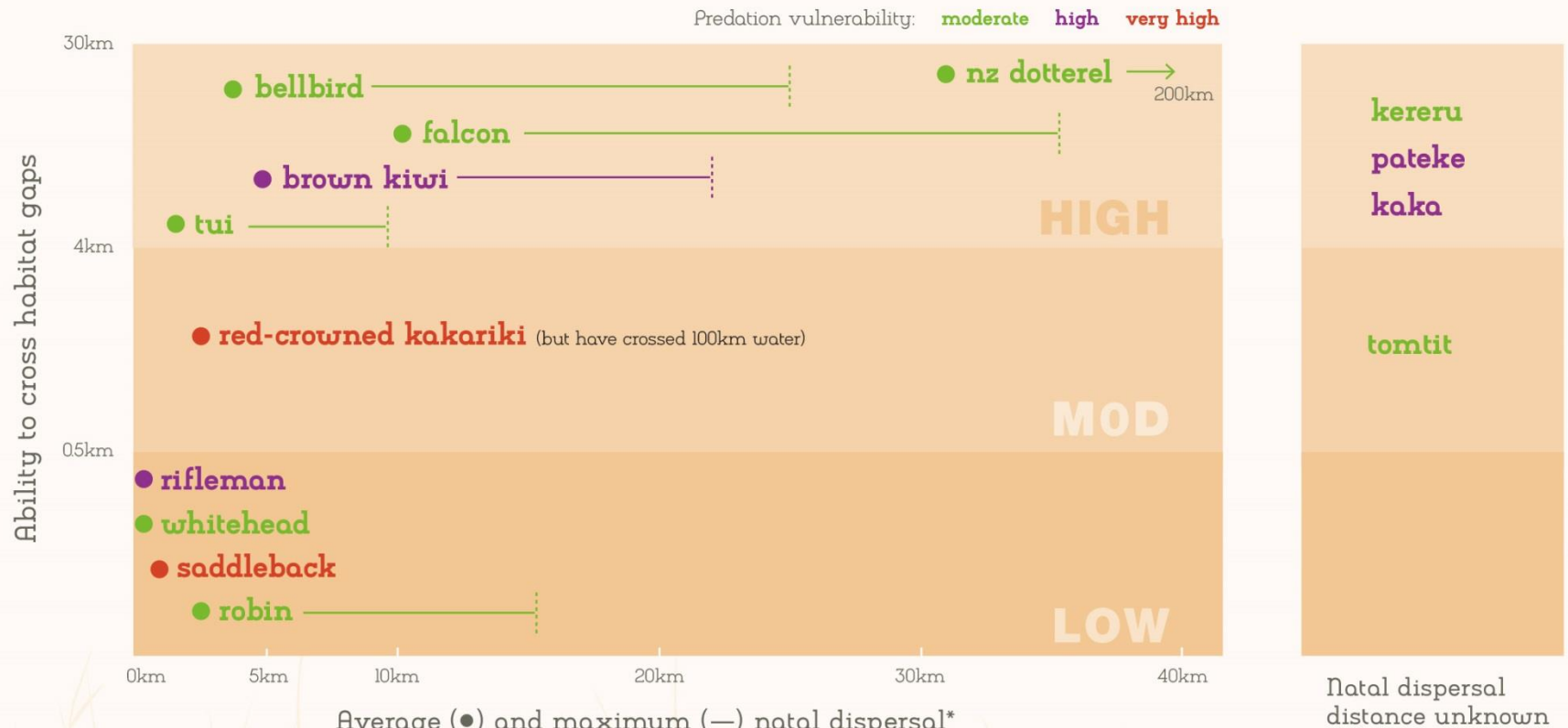RESTORING BIRDS in Cape-to-City

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Main kinds of bird movement

- *Seasonal movement* – e.g. tui may fly 20 km in winter

- *Natal dispersal* – from where a bird fledges to where it first nests e.g. NI kokako, 1600 m, n=174; 15 km for Wenderholm robins

- *Breeding dispersal* – occasional movements adult birds make between nesting locations e.g. tui 53 km

- *Post-translocation dispersal* e.g. Rakiura robin crossed 800 m over water, cf 100 m limit for dispersing NI robins*
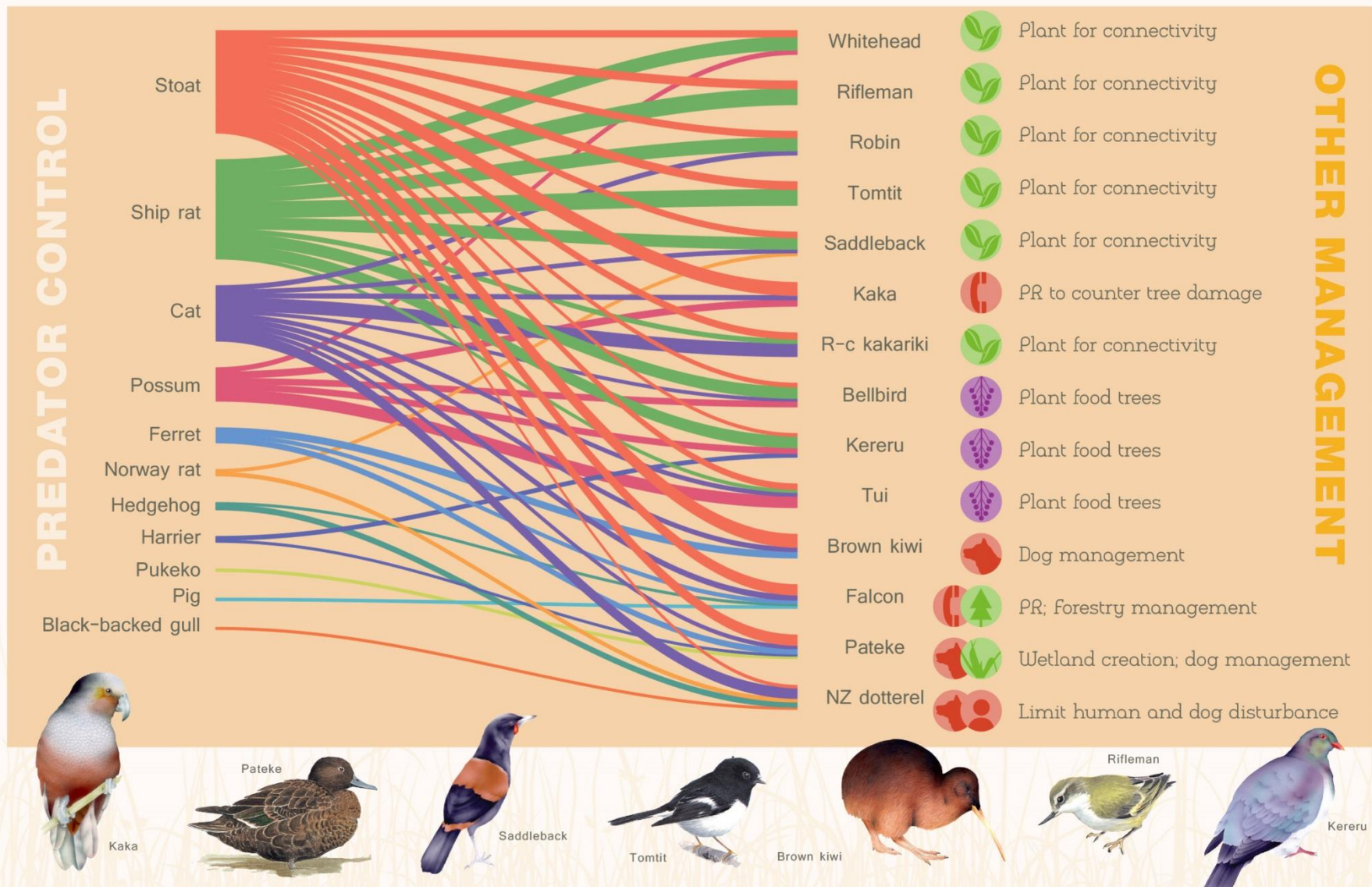
Other key factors: Gap-crossing, predation vulnerability.

*Richardson et al. 2015

BIRD mobility and vulnerability

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Predation vulnerability: moderate   high   very high

Ability to cross habitat gaps

30km — bellbird ———————— • nz dotterel →
200km
falcon ————————
brown kiwi ————
tui ——
4km
HIGH

red-crowned kakariki (but have crossed 100km water)
MOD

0.5km
rifleman
whitehead
saddleback
robin ——————
LOW

0km   5km   10km   20km   30km   40km

Average (●) and maximum (—) natal dispersal*

* distance from fledging site to where a bird breeds. NB Natal dispersal is generally poorly known.

kereru
pateke
kaka

tomtit

Natal dispersal distance unknown

NZ Dotterel   Red-crowned kakariki   Falcon   Whitehead   Tui   Bellbird   Robin

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What do **Cape-to-City** BIRDS NEED?

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PREDATOR CONTROL

Stoat
Ship rat
Cat
Possum
Ferret
Norway rat
Hedgehog
Harrier
Pukeko
Pig
Black-backed gull

Whitehead — Plant for connectivity
Rifleman — Plant for connectivity
Robin — Plant for connectivity
Tomtit — Plant for connectivity
Saddleback — Plant for connectivity
Kaka — PR to counter tree damage
R-c kakariki — Plant for connectivity
Bellbird — Plant food trees
Kereru — Plant food trees
Tui — Plant food trees
Brown kiwi — Dog management
Falcon — PR; forestry management
Pateke — Wetland creation; dog management
NZ dotterel — Limit human and dog disturbance

OTHER MANAGEMENT

Kaka
Pateke
Saddleback
Tomtit
Brown kiwi
Rifleman
Kereru

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PEST-FREE Cape-to-City 2050

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