New Zealand
GARDEN BIRD SURVEY

State of NZ Garden Birds

Te Āhua o ngā Manu o te Kāri i Aotearoa

Manaaki Whenua Landcare Research

2021

Paul Sorrell

BACKYARD BEATS

What are our birds telling us?

Birds act as backyard barometers – telling us about the health of the environment we live in. They are signalling significant changes in our environment over the last 10 years. We should be listening.

Using cutting-edge techniques, Manaaki Whenua – Landcare Research has distilled a substantial information base – bird counts gathered by New Zealanders from over 41,000 garden surveys since 2010 – into simple but powerful metrics.

Positive signals are emerging for four native species:

Kererū counts now show a rapid increase (102%) over 10 years compared to the moderate increase seen last year, and the rapid increase over 5 years continues (57%).

We continue to see a shallow increase in pīwakawaka (fantail) counts over the long term (47%), with a moderate, rather than rapid, increase in the short term.

Tūī (kōkō) counts continue to show a shallow increase over 10 years nationally (30%), with moderate or rapid increases seen in four regions (Canterbury, Marlborough, Otago, and the West Coast) in the long or short term.

The long-term shallow decline in silvereye (tauhou) is lessening (10% compared with 23% last year), and the short-term trend has accelerated to a moderate increase (40%).

Key signals for introduced species that also act as environmental indicators:

Myna (maina) counts continue to show little or no change nationally, with shallow increases in four regions over 10 years and in three regions over 5 years. Their counts in Wellington now show a rapid increase in both the long and short term (202% and 112%, respectively).

The long-term moderate decline in starling (tāringi) counts seen last year has lessened to a shallow decline (15%), and the short-term shallow decline (9%) continues.

The trend for a shallow increase over 10 years that was first detected for goldfinch last year has increased (from 18% to 30%), with the 5-year trend accelerating from a moderate increase (38%) seen last year to a rapid increase (42%).

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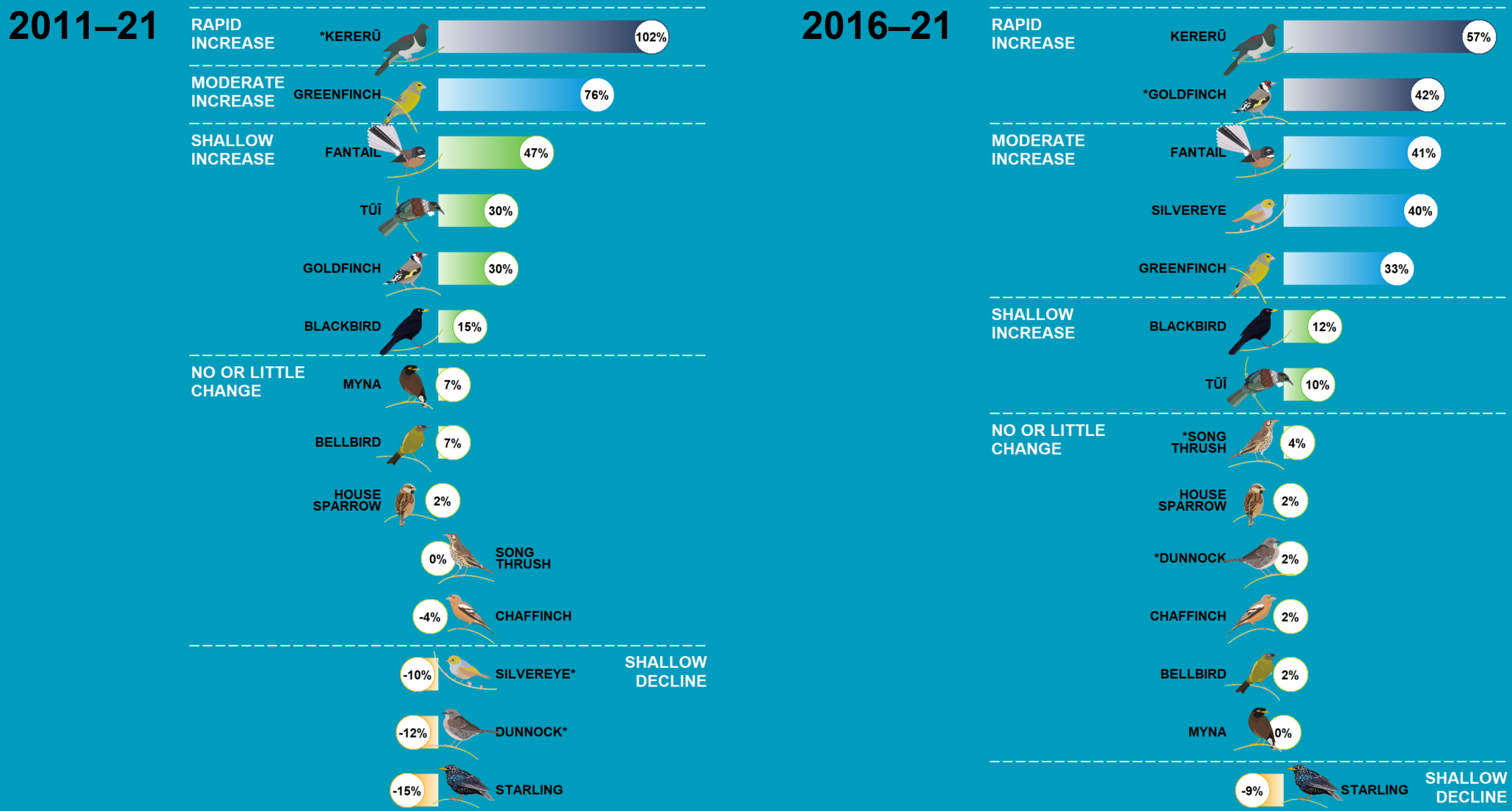
NATIONAL PICTURE

How have garden bird counts changed?

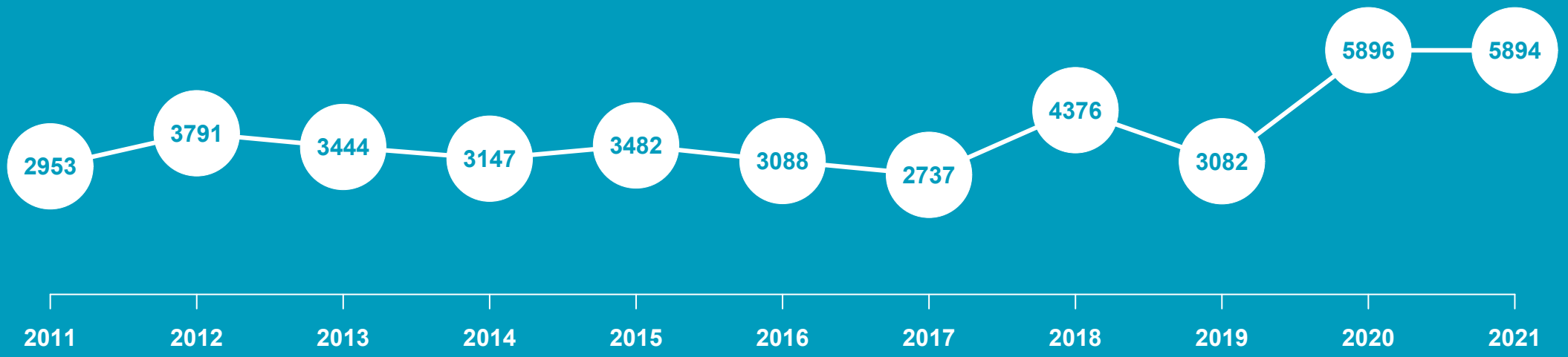


* Based on available data, evidence for these species' estimates is weak.

Data source: 41,890 and 25,073 garden surveys nationwide for 2011–21 and 2016–21, respectively.

41,890
garden surveys nationwide

Thanks to all our volunteer bird counters!



New Zealand GARDEN BIRD SURVEY

We have estimated how bird counts have changed over the last 10- and 5-year periods in different regions, districts, and neighbourhoods across New Zealand for 14 common garden visitors – five native and nine introduced birds.

Thanks to all our volunteer bird counters, 41,890 garden surveys have been completed nationwide since 2011. We use specialised statistical tools to account for variation in sampling effort between regions, districts, and suburbs over time. We also account for variation in bird counts depending on whether the surveyed gardens were in a rural or urban setting, and whether birds were fed or not. We also correct for the actual number of gardens in each area.

We then classify these changes according to their direction and size (see diagram below) to help us identify changes of potential concern or interest.

How have bird counts changed?

Drawing attention to changes in counts that may be of concern or interest

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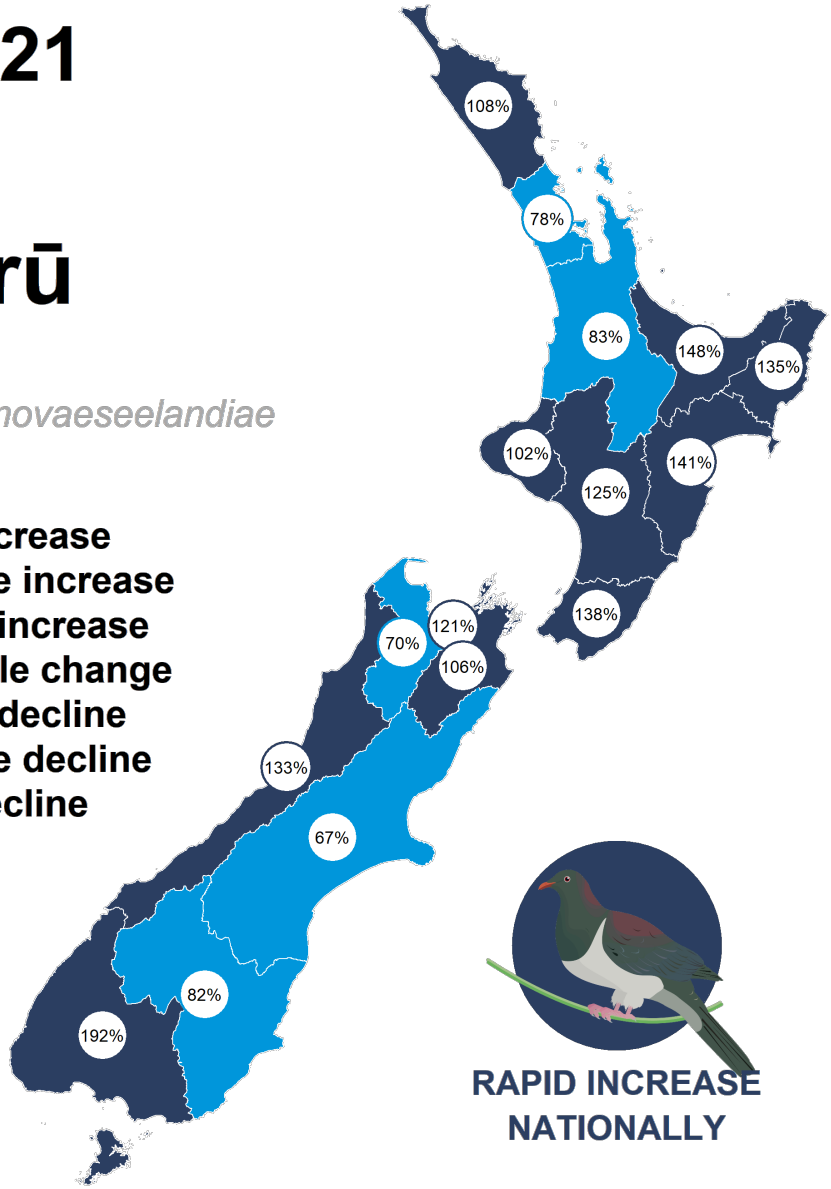
New Zealand GARDEN BIRD SURVEY

How have garden bird counts changed across regions?

2011–21



2016–21

Kererū

Kererū

Hemiphaga novaeseelandiae

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline

RAPID INCREASE NATIONALLY

RAPID INCREASE NATIONALLY

DATA SOURCE: 41,890 and 25,073 garden surveys for 2011–21 and 2016–21, respectively.

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New Zealand GARDEN BIRD SURVEY

How have garden bird counts changed across regions?

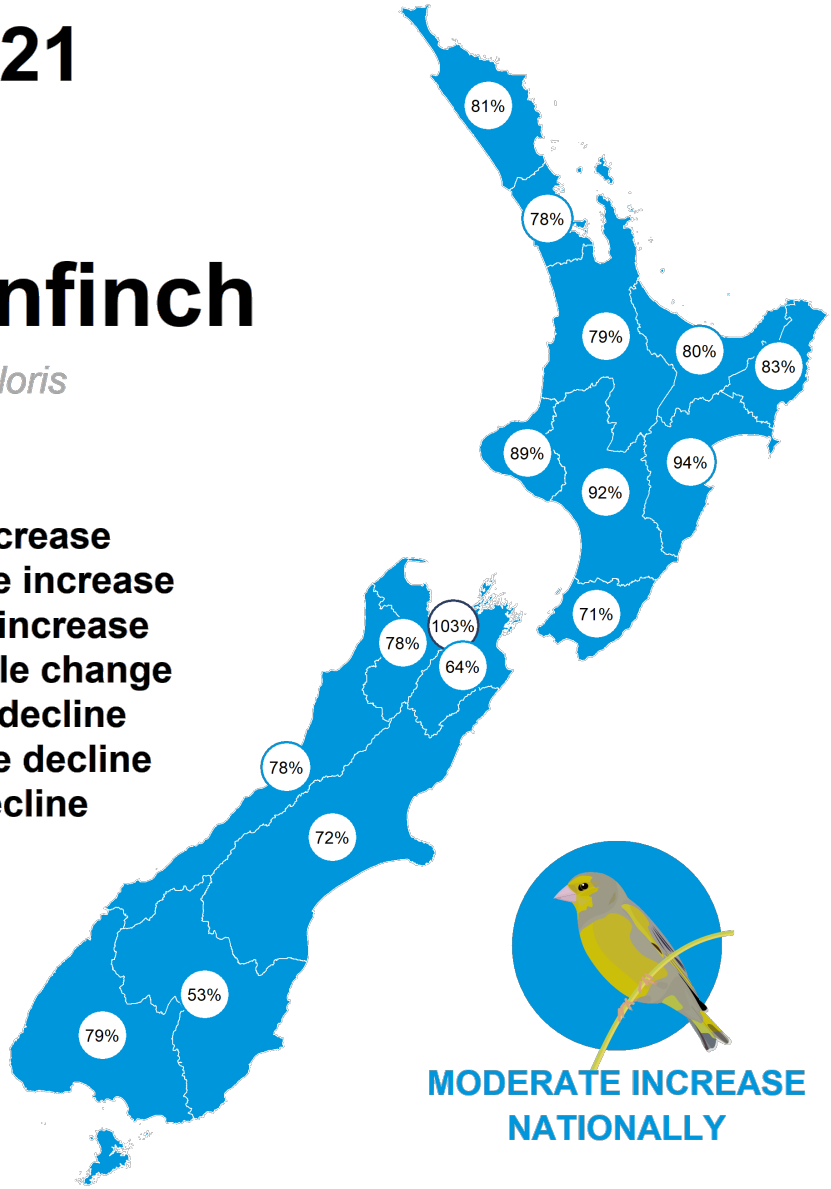
2011–21

2016–21

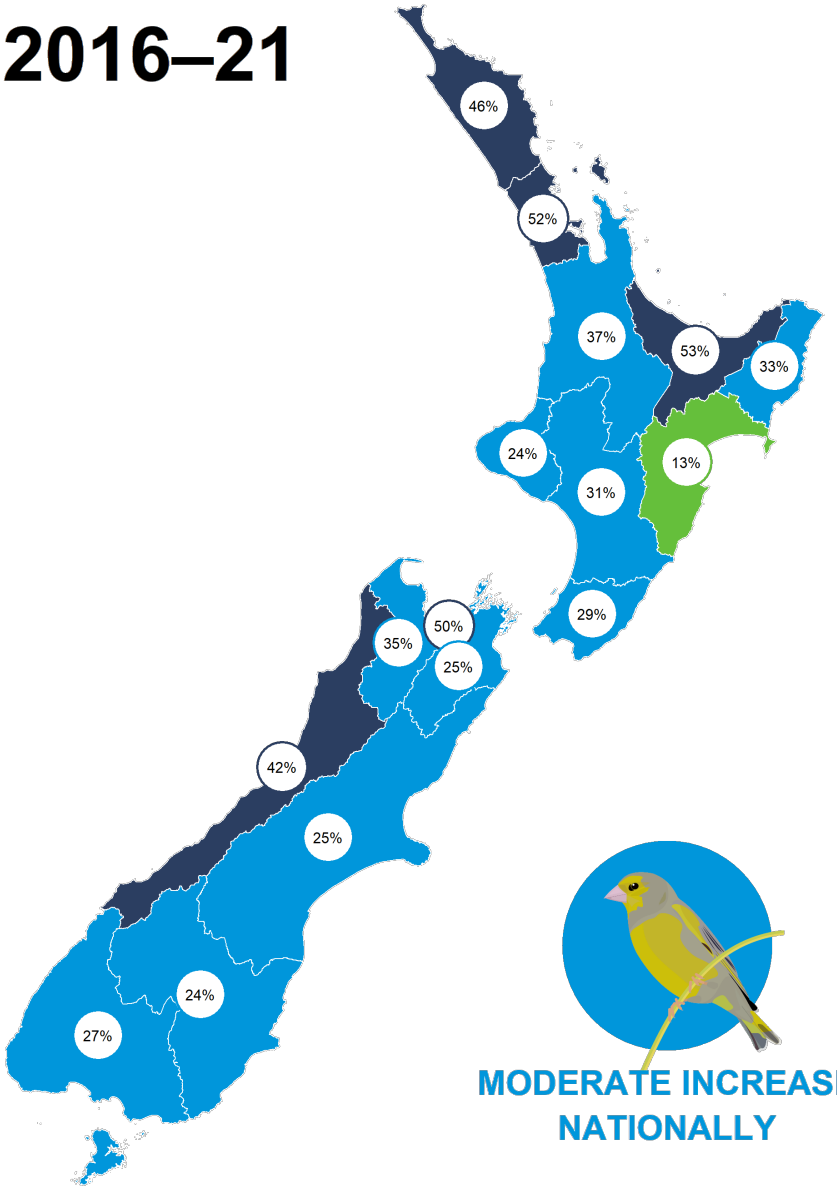
Greenfinch

Carduelis chloris

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline



MODERATE INCREASE NATIONALLY



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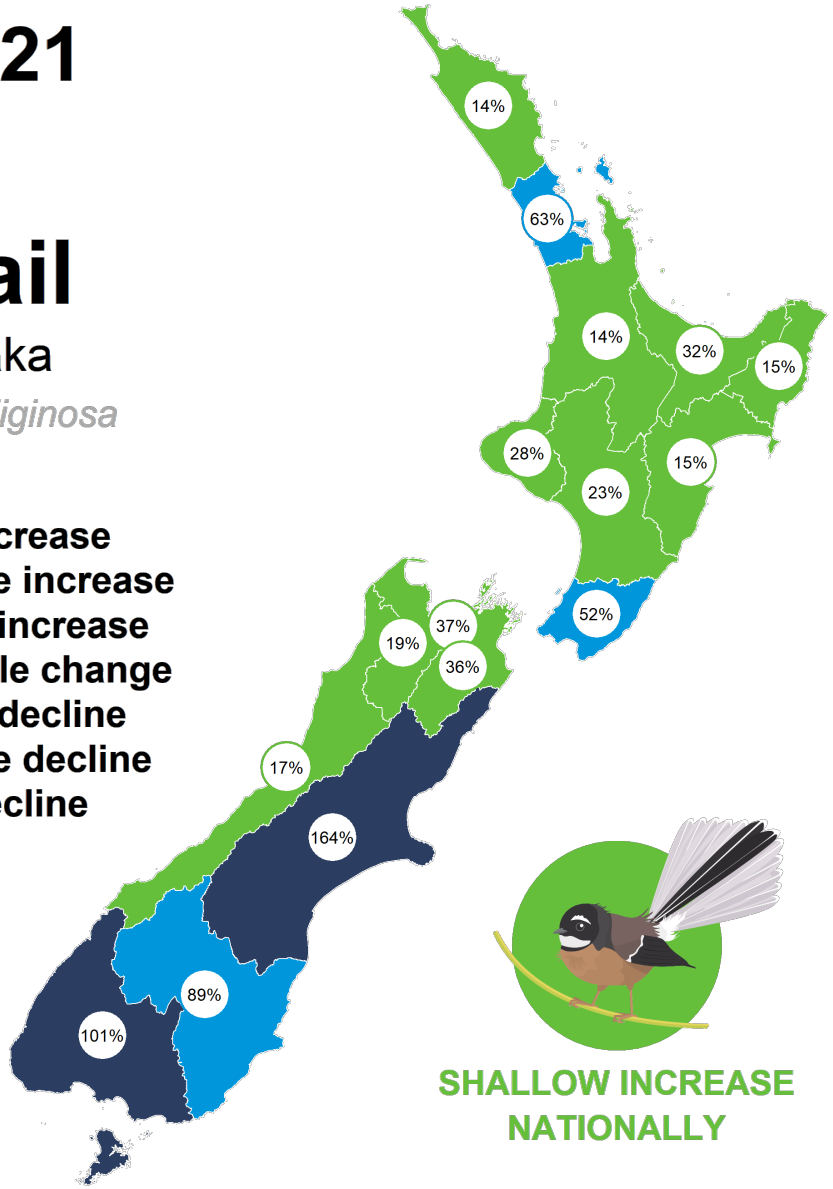
New Zealand GARDEN BIRD SURVEY

How have garden bird counts changed across regions?

2011–21



2016–21

Fantail

Pīwakawaka

Rhipidura fuliginosa

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline

SHALLOW INCREASE NATIONALLY

MODERATE INCREASE NATIONALLY

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New Zealand GARDEN BIRD SURVEY

How have garden bird counts changed across regions?

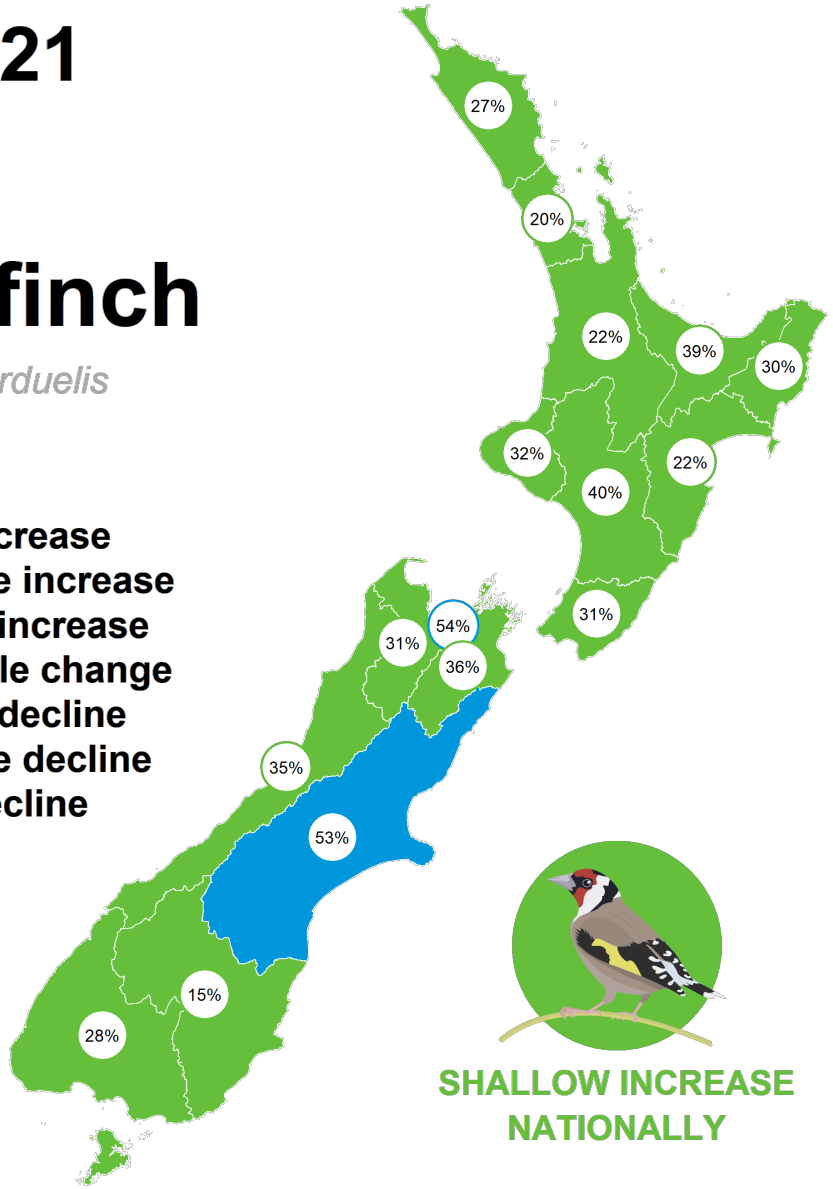
2011–21

2016–21

Goldfinch

Carduelis carduelis

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline



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RAPID INCREASE NATIONALLY

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New Zealand GARDEN BIRD SURVEY

How have garden bird counts changed across regions?

2011–21

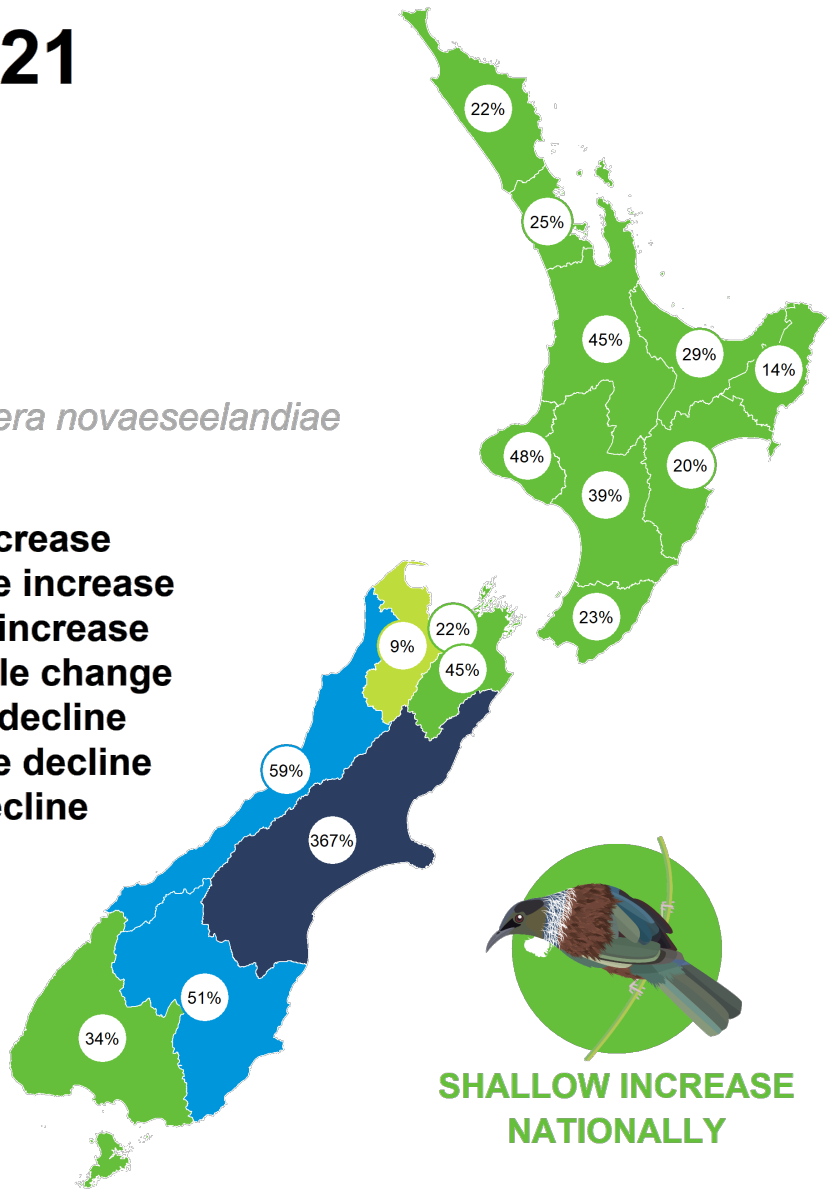
2016–21

Tūī

Kōkō

Prosthemadera novaeseelandiae

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline



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New Zealand GARDEN BIRD SURVEY

How have garden bird counts changed across regions?

2011–21

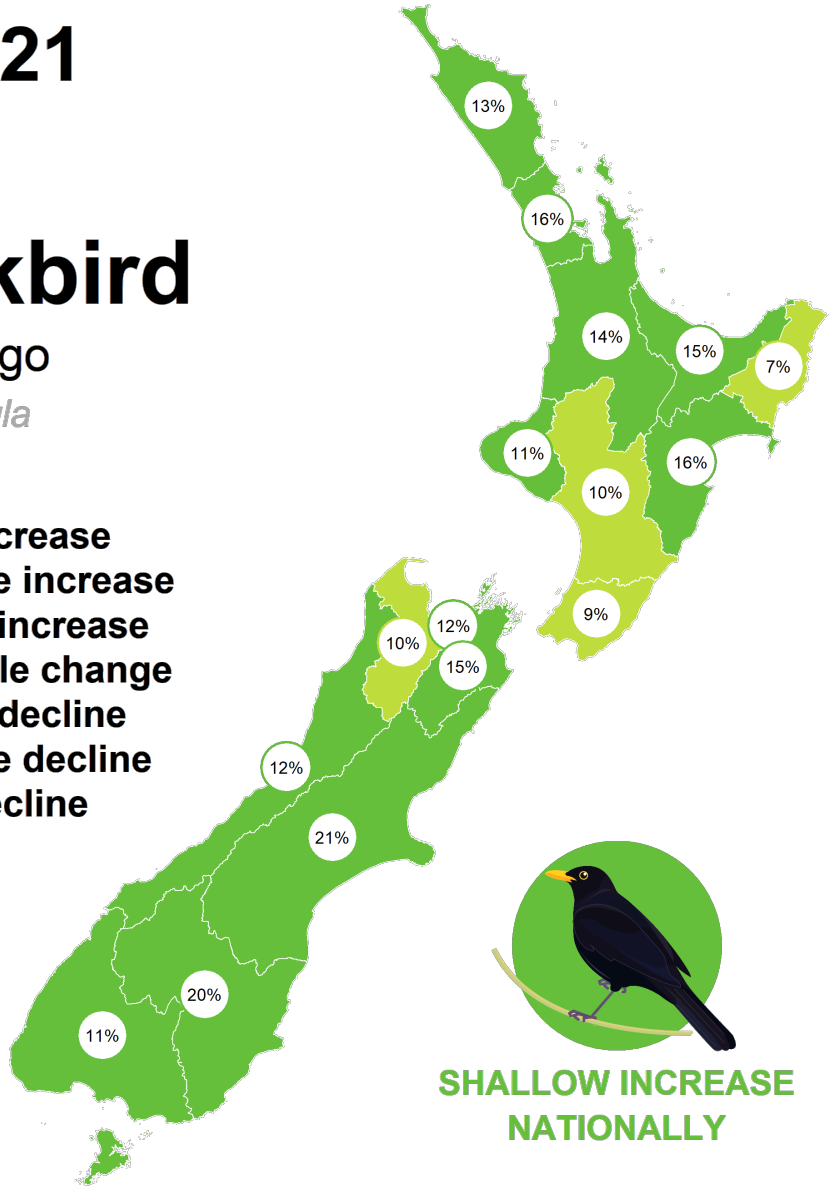
2016–21

Blackbird

Manu pango

Turdus merula

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline



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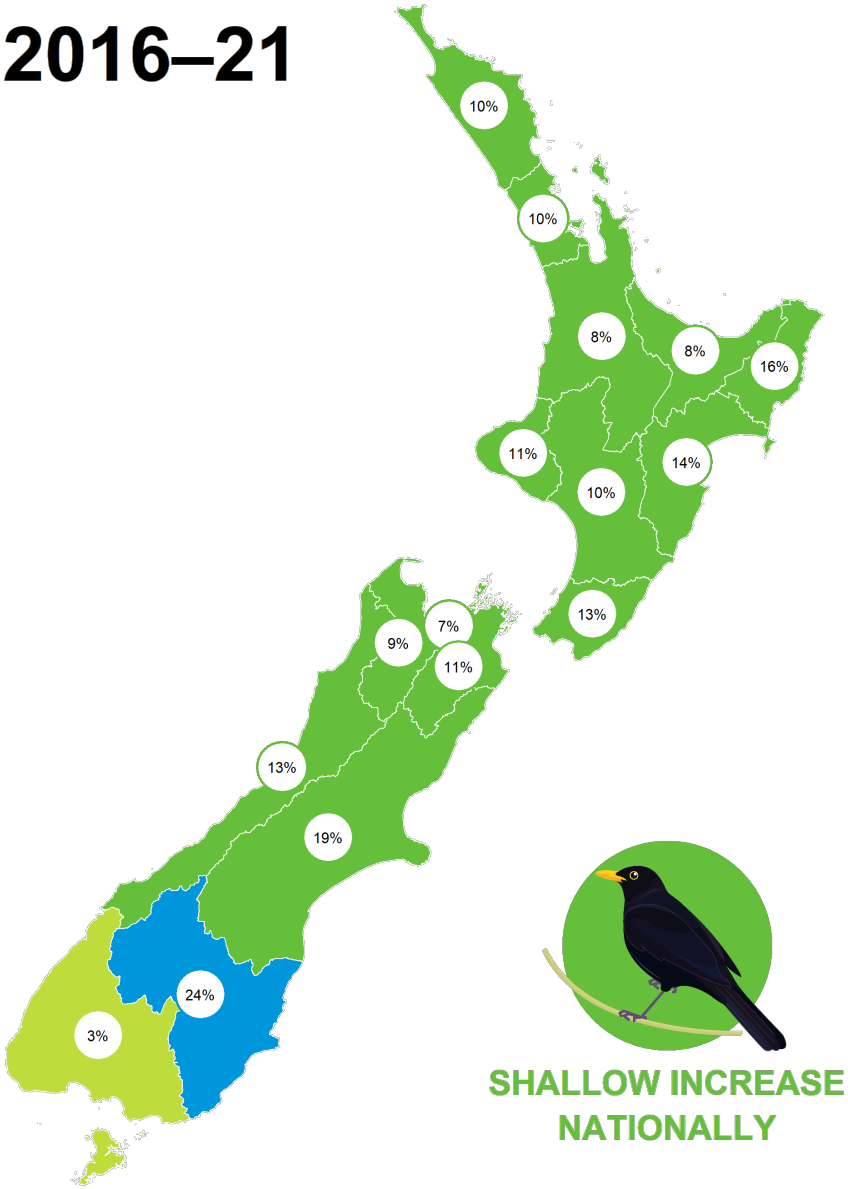

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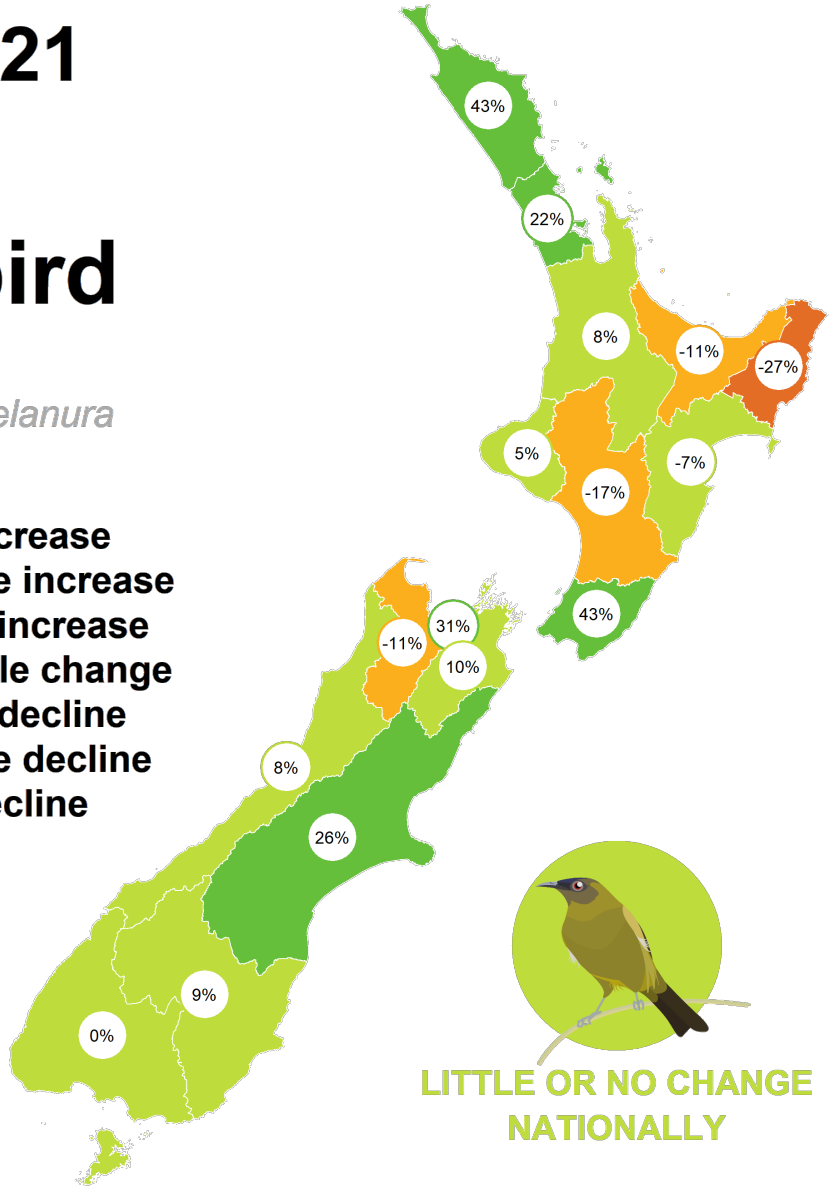

2016–21

Bellbird

Korimako

Anthornis melanura

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline

LITTLE OR NO CHANGE NATIONALLY

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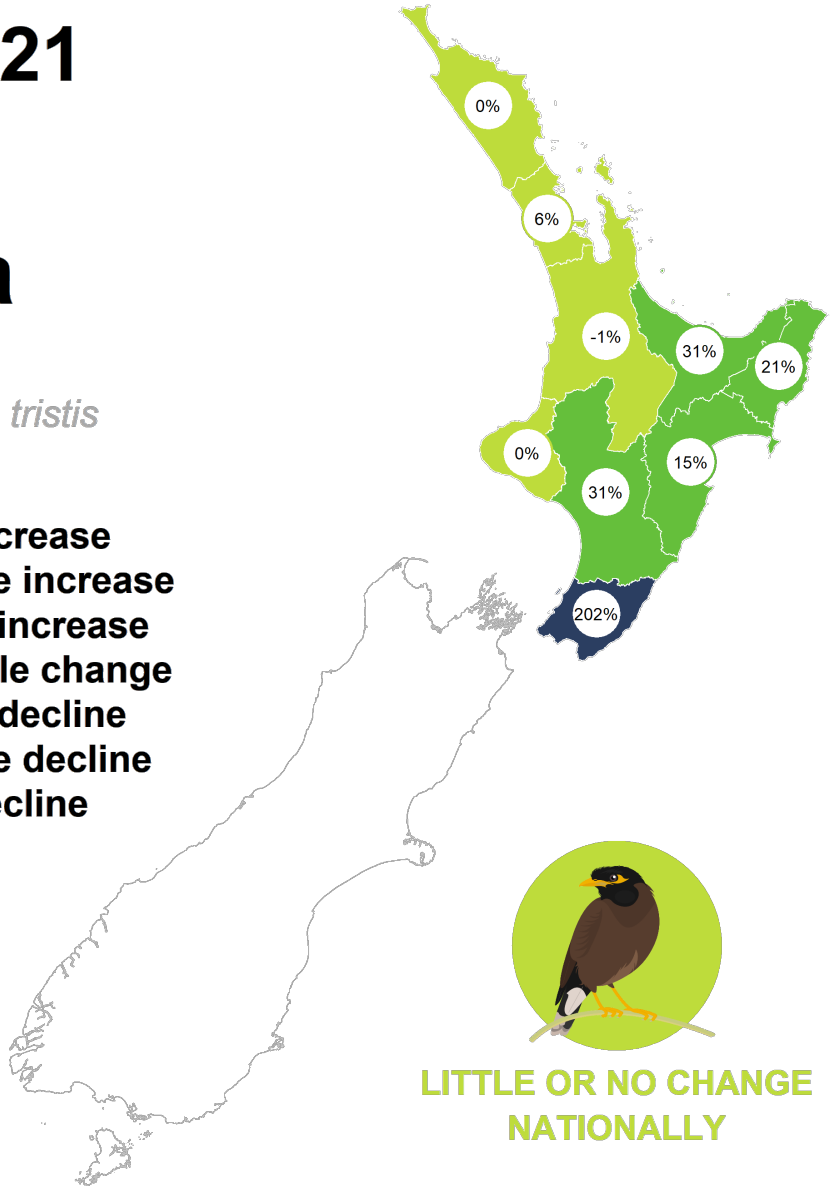
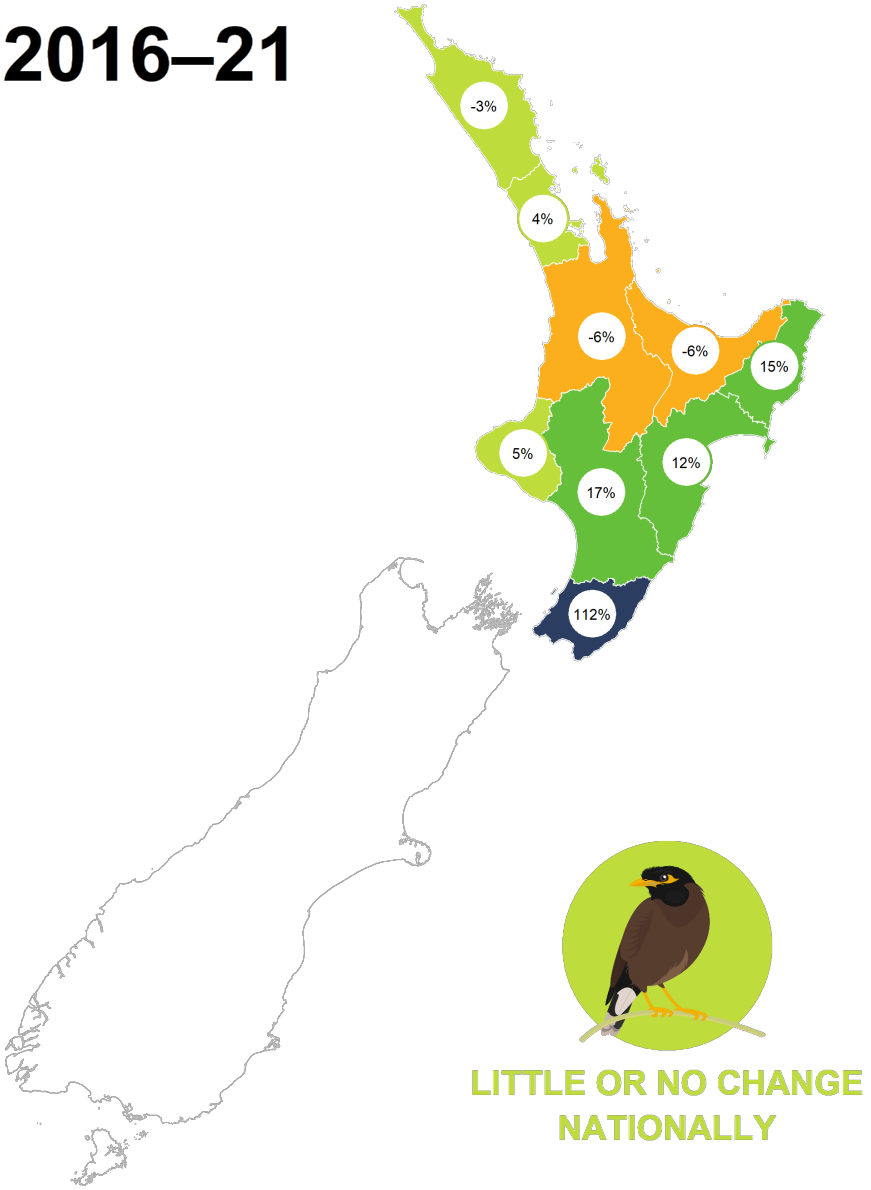


2016–21



Myna

Maina

Acridotheres tristis

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline

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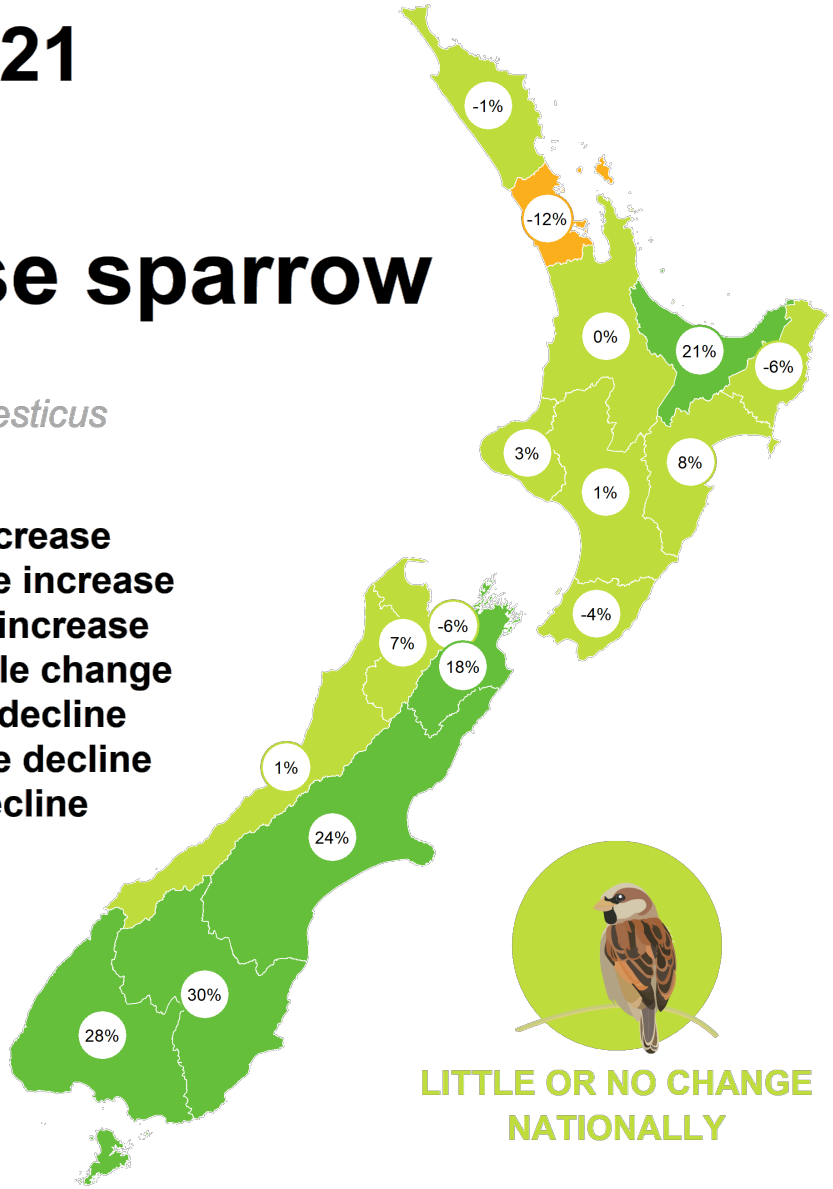
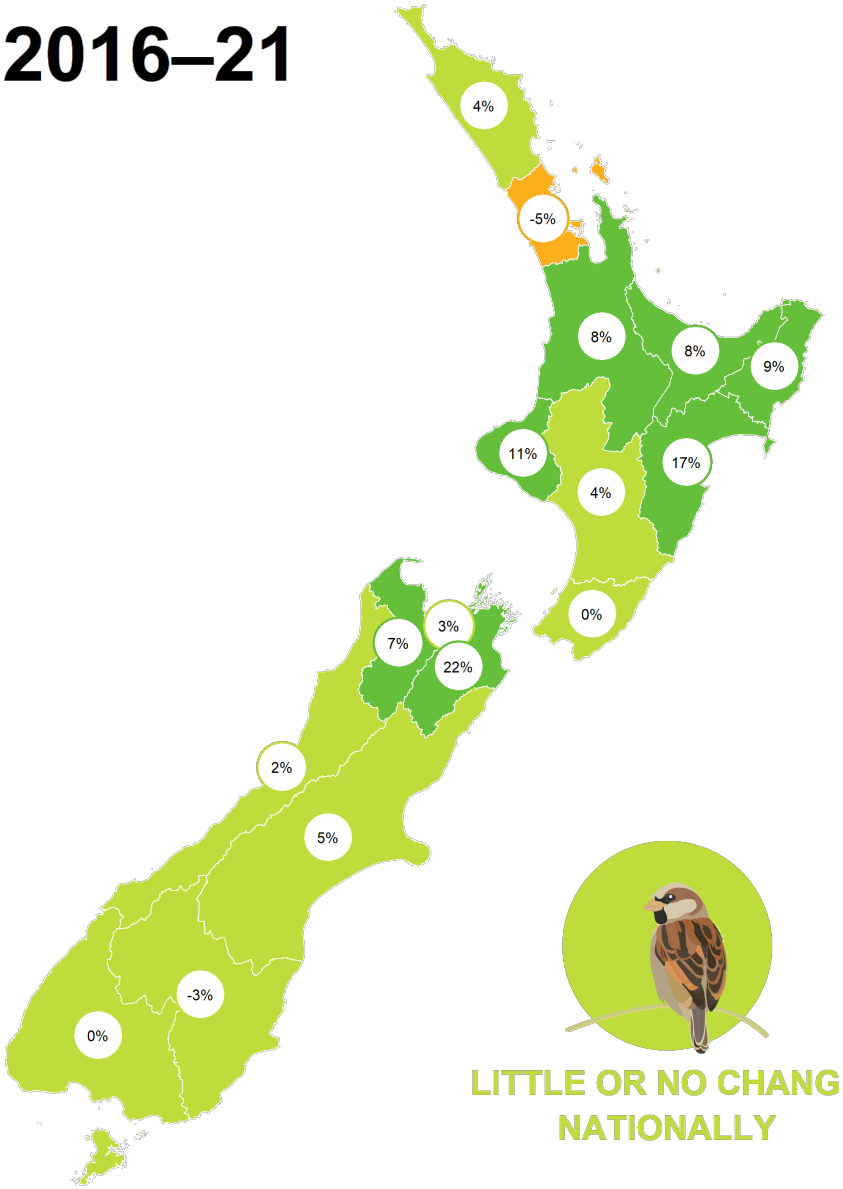


2016–21



House sparrow

Tiu

Passer domesticus

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline

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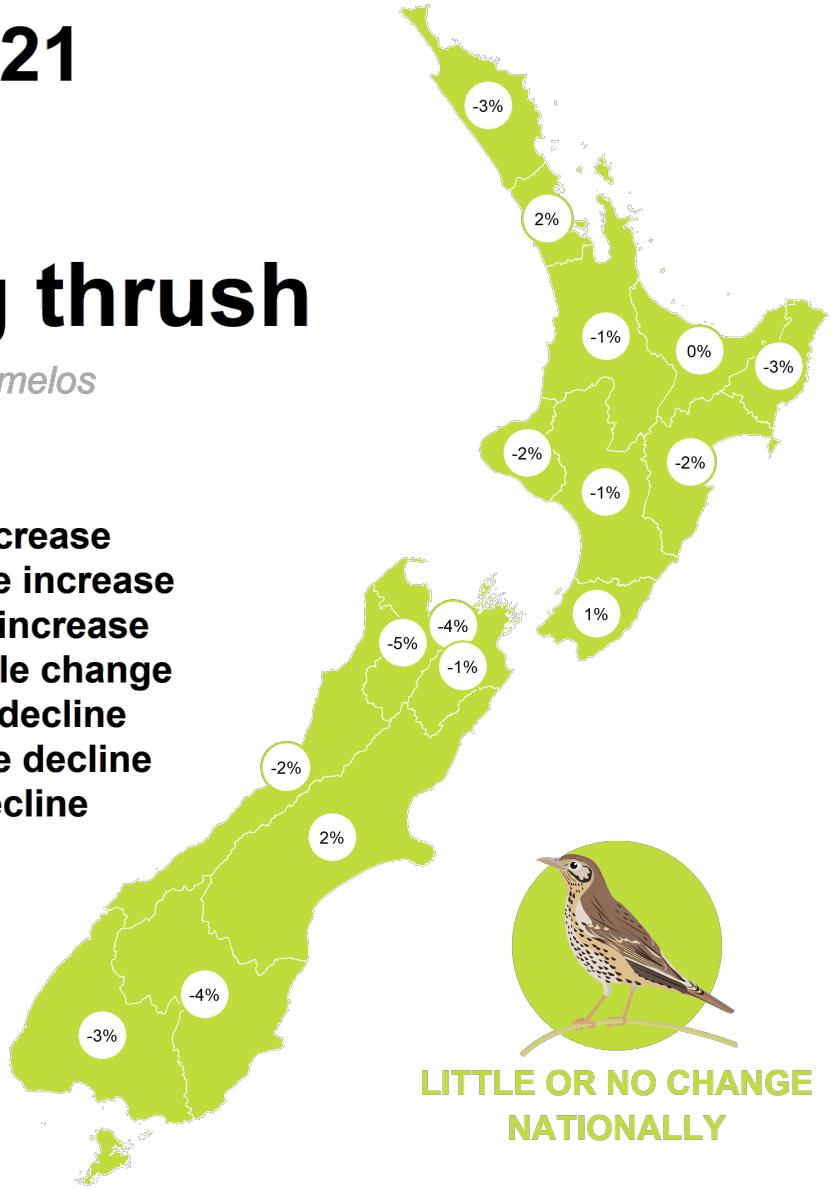
2016–21

Song thrush

Turdus philomelos

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline



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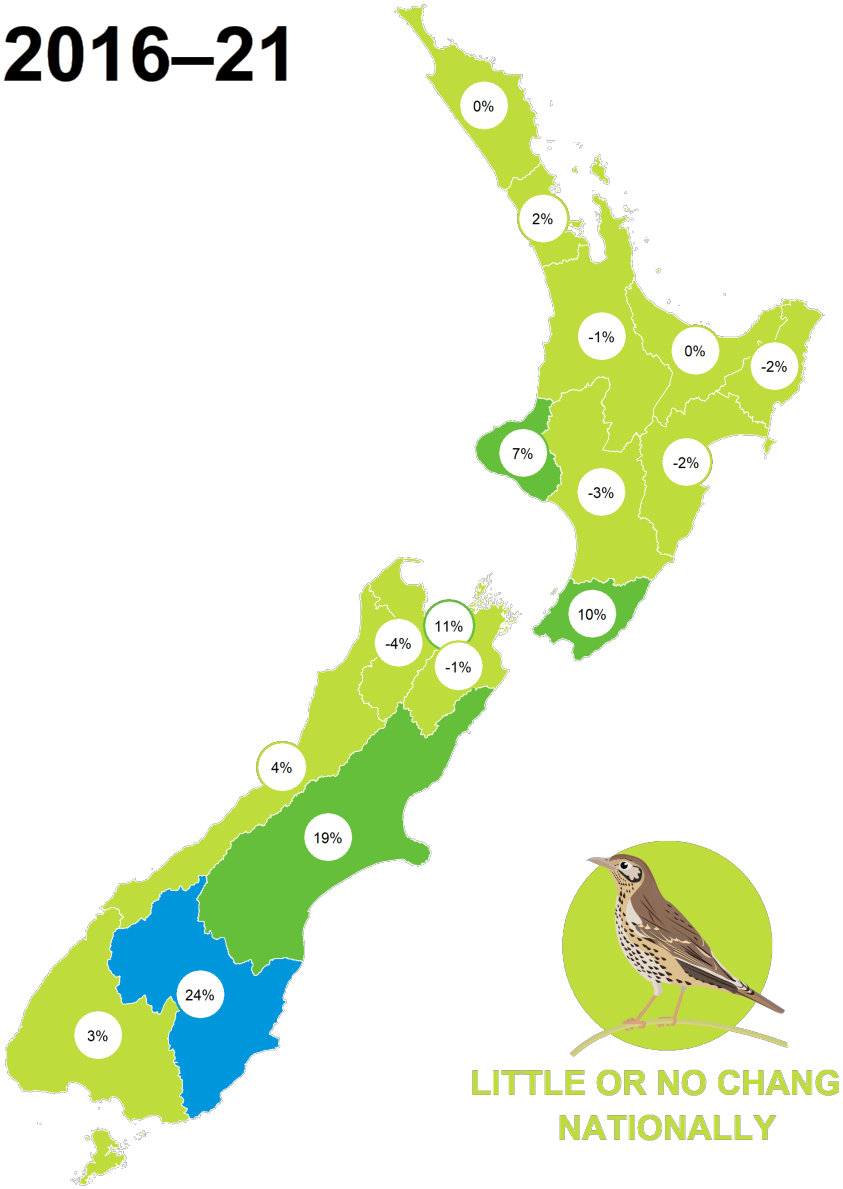

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2011–21

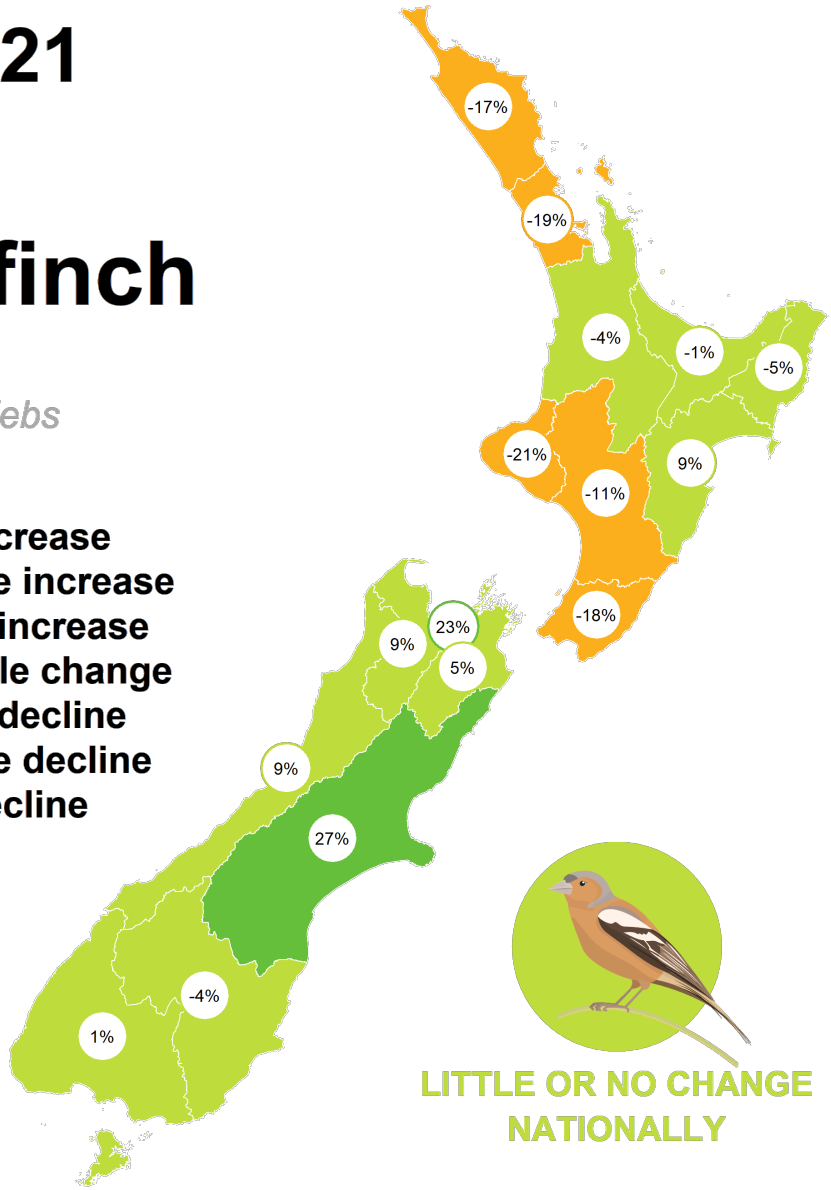
2016–21

Chaffinch

Pahirini

Fringilla coelebs

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline



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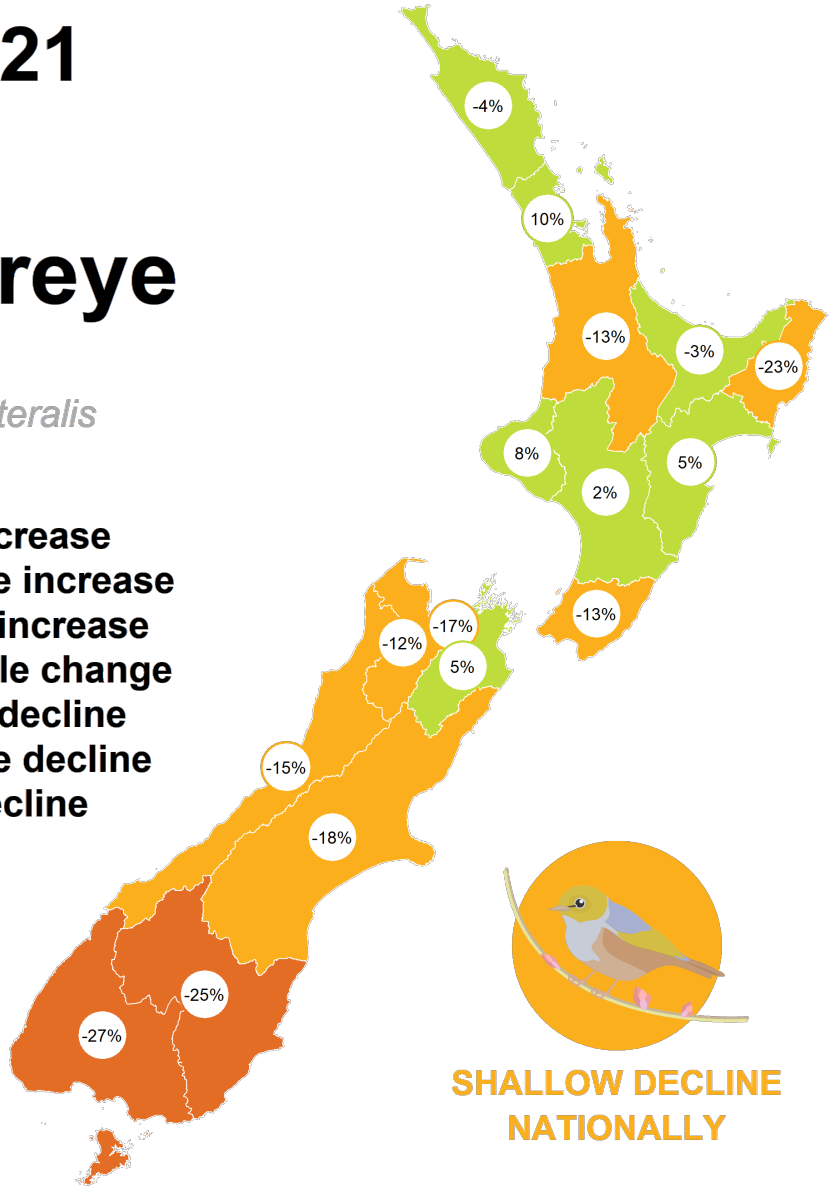

2016–21

Silvereye

Tauhou

Zosterops lateralis

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline

SHALLOW DECLINE NATIONALLY

MODERATE INCREASE NATIONALLY

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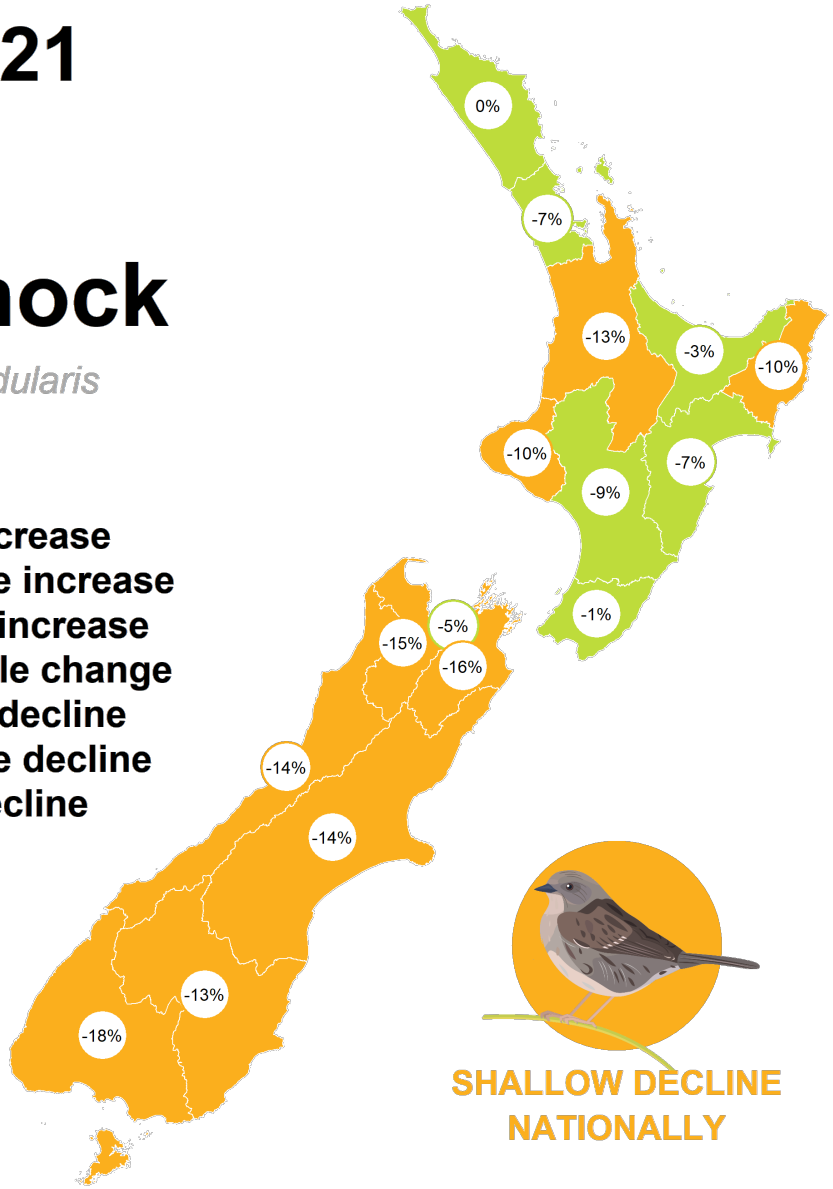
2011–21

2016–21

Dunnock

Prunella modularis

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline



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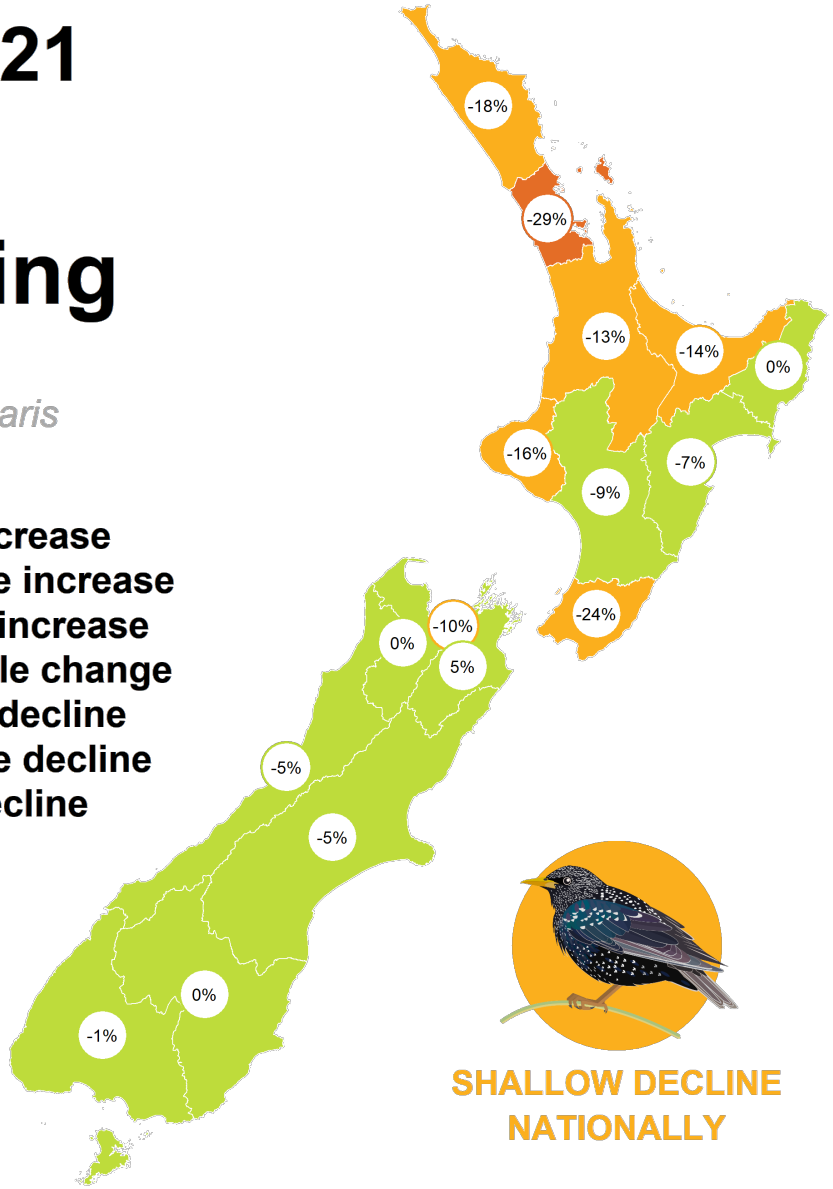
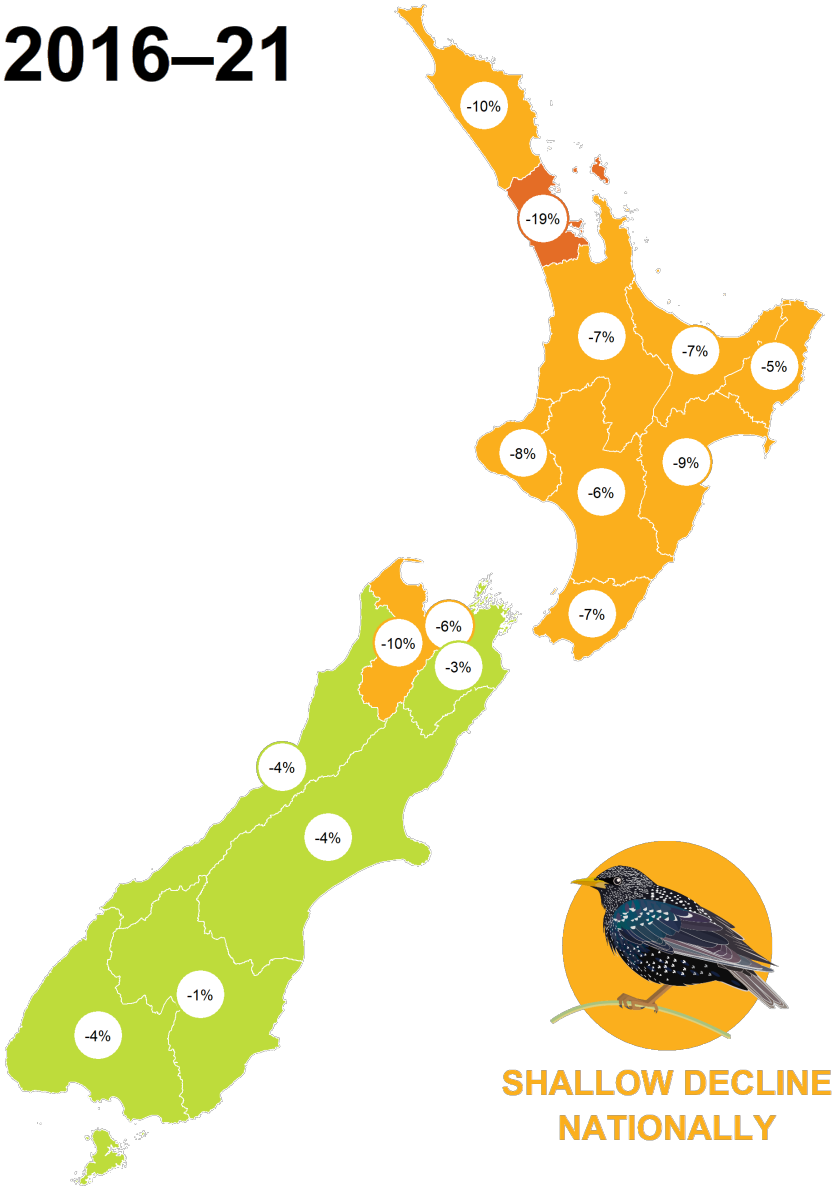


2016–21



Starling

Tāringi

Sturnus vulgaris

- Rapid increase
- Moderate increase
- Shallow increase
- No or little change
- Shallow decline
- Moderate decline
- Rapid decline

SHALLOW DECLINE NATIONALLY

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2022

25 June to 3 July

Visit our webpage to learn more:

gardenbirdsurvey.landcareresearch.co.nz

This report should be cited as: Hayman E, Brandt AJ, MacLeod CJ, Howard S, Gormley AM, Spurr EB. 2021. State of NZ Garden Birds 2021 | Te Āhua o ngā Manu o te Kāri i Aotearoa. Manaaki Whenua – Landcare Research, Lincoln. ISSN 2744-5267.

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