

# 2017

## STATE OF NZ GARDEN BIRDS

Te Āhua o ngā Manu o te Kāri i Aotearoa



Photo: © BJ Hunter; Landscape Artist, NZ



Manaaki Whenua  
Landcare Research



New Zealand  
**GARDEN  
BIRD  
SURVEY**



# 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 11 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 31,000 garden surveys since 2007 – into simple but powerful metrics.



A positive picture is emerging for a native garden bird, tūi (kōkō); this species has increased across all regions, albeit at a relatively low rate (c. 22% over 11 years). In sharp contrast, silvereye (tauhou) counts have almost halved over the same period.



Six of the most common species (starling, song thrush, goldfinch, chaffinch, dunnock and blackbird) in our gardens have also experienced shallow to moderate declines (10–31% over 11 years). It might be tempting to dismiss these declines as unimportant because these birds were all introduced to New Zealand from Europe. However, they are signalling change in our urban and rural environments which we need to better understand.



Manaaki Whenua  
Landcare Research



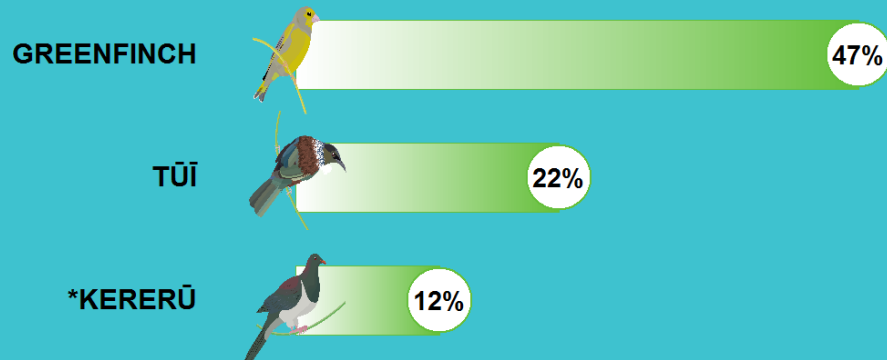
New Zealand  
GARDEN  
BIRD  
SURVEY

# How have bird counts changed?

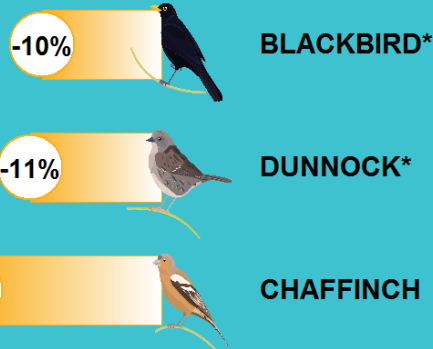
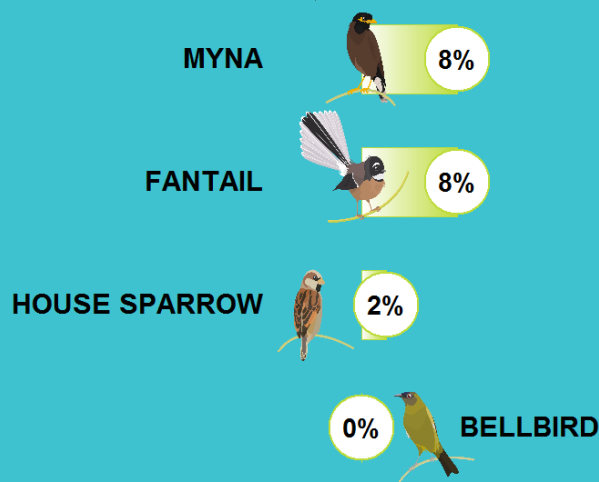


## NATIONAL PICTURE | 2007-2017

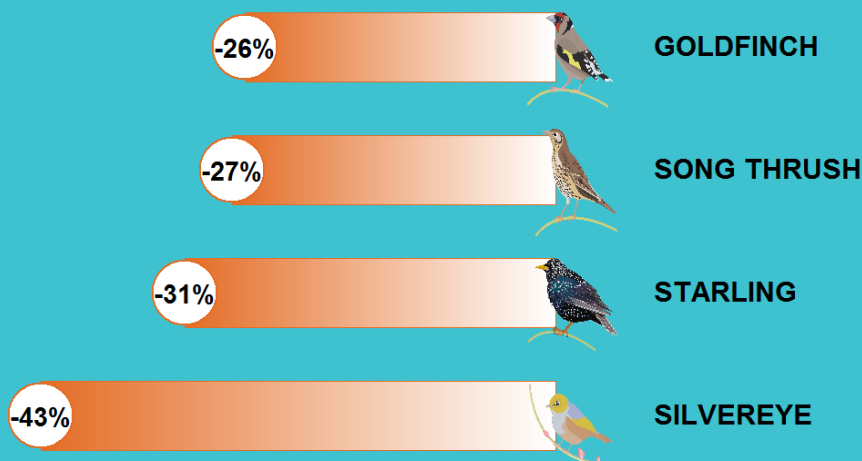
### SHALLOW INCREASE



### NO OR LITTLE CHANGE



### SHALLOW DECLINE



### MODERATE DECLINE

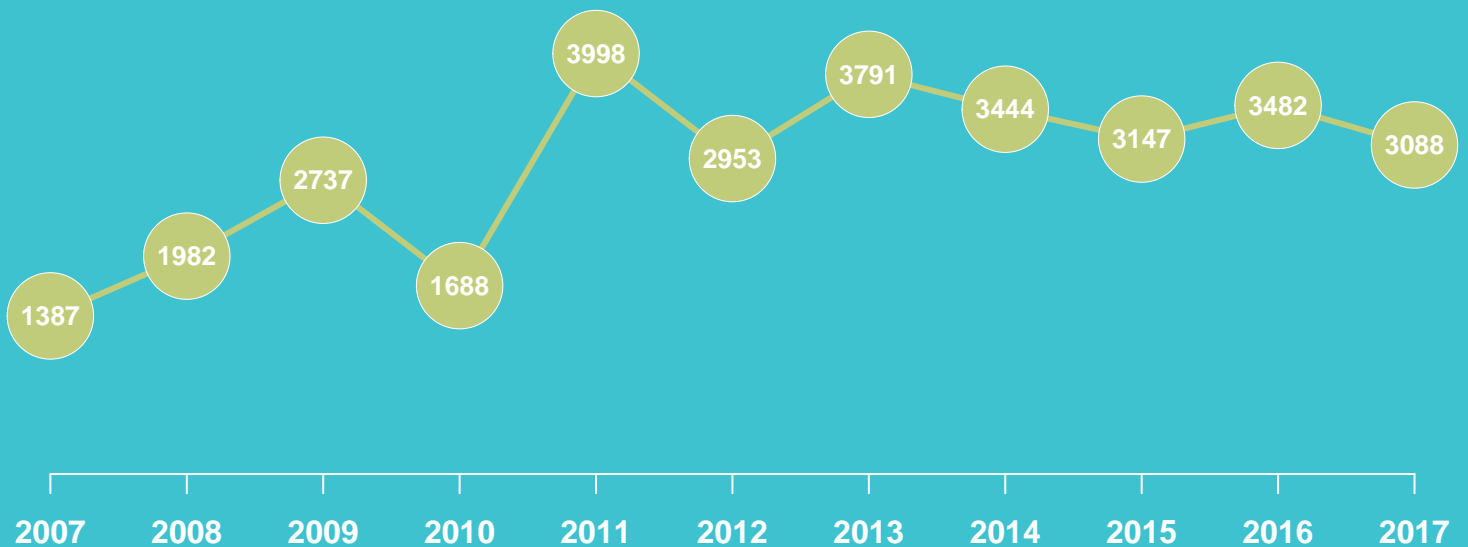
Data source: 31,679 garden surveys nationwide between 2007 and 2017.

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



**THANK YOU**  
to all our volunteer  
bird counters!

**31,679**  
garden  
surveys  
nationwide





We have estimated how bird counts have changed since 2007 across New Zealand's regions for 14 common garden visitors – five native and nine introduced birds.

Thanks to all our volunteer bird counters, 31,679 garden surveys have been completed nationwide since 2007. We use specialised statistical tools to account for variation in sampling effort between regions, towns 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 if 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

### Counts decline ←

50% or more

25% or more

10% or more

RAPID DECLINE

MODERATE DECLINE

SHALLOW DECLINE

NO OR LITTLE CHANGE

### Counts increase →

Over 10%

Over 50%

Over 100%

SHALLOW INCREASE

MODERATE INCREASE

RAPID INCREASE

# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

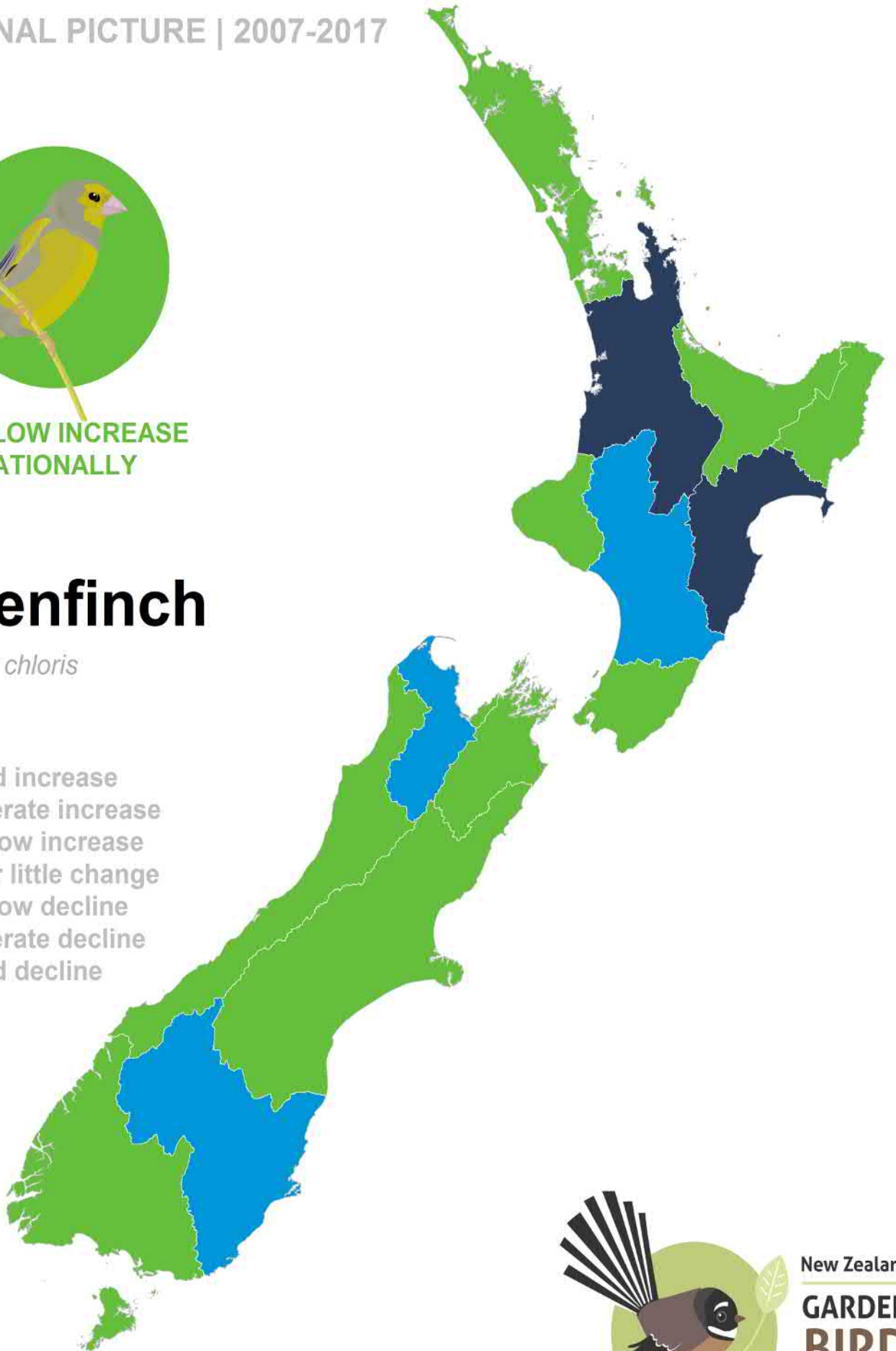


SHALLOW INCREASE  
NATIONALLY

## Greenfinch

*Carduelis chloris*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017



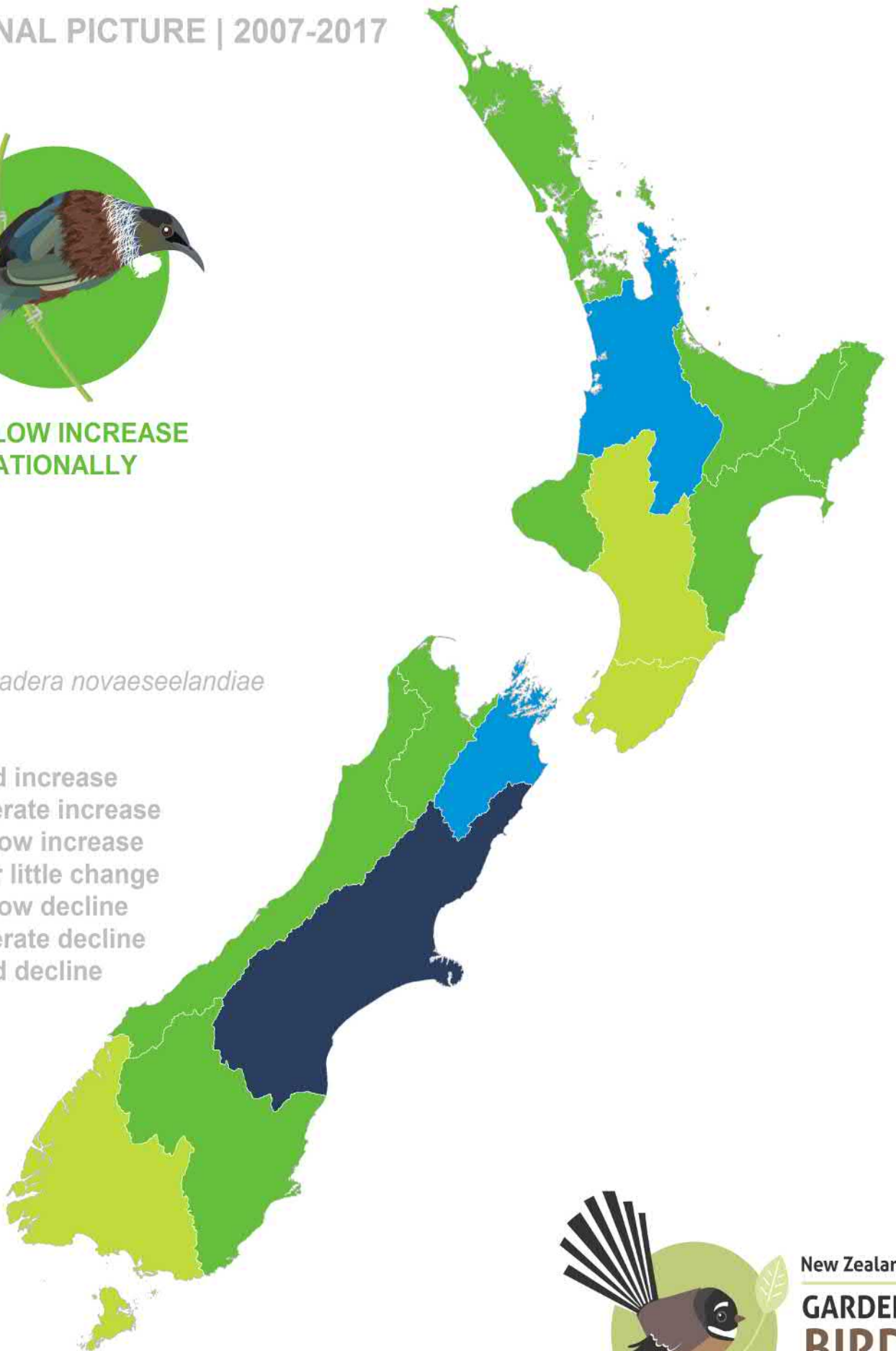
SHALLOW INCREASE  
NATIONALLY

## Tūi

Kōkō

*Prothemadera novaeseelandiae*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017



## New Zealand pigeon

Kererū

*Hemiphaga novaeseelandiae*

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



Data source: 31,679 garden surveys between 2007 and 2017.





# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017



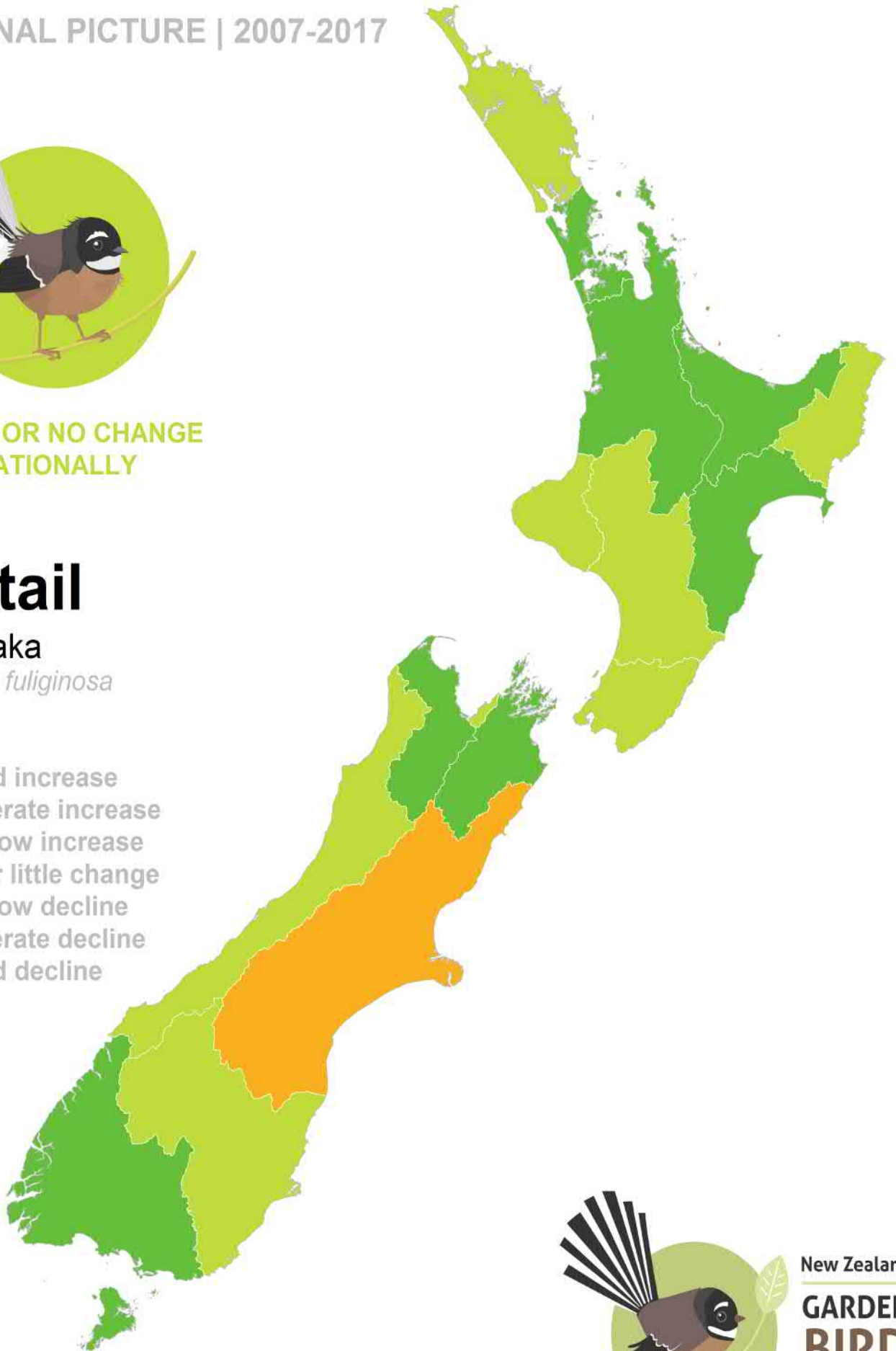
LITTLE OR NO CHANGE  
NATIONALLY

## Fantail

Pīwaiwaka

*Rhipidura fuliginosa*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

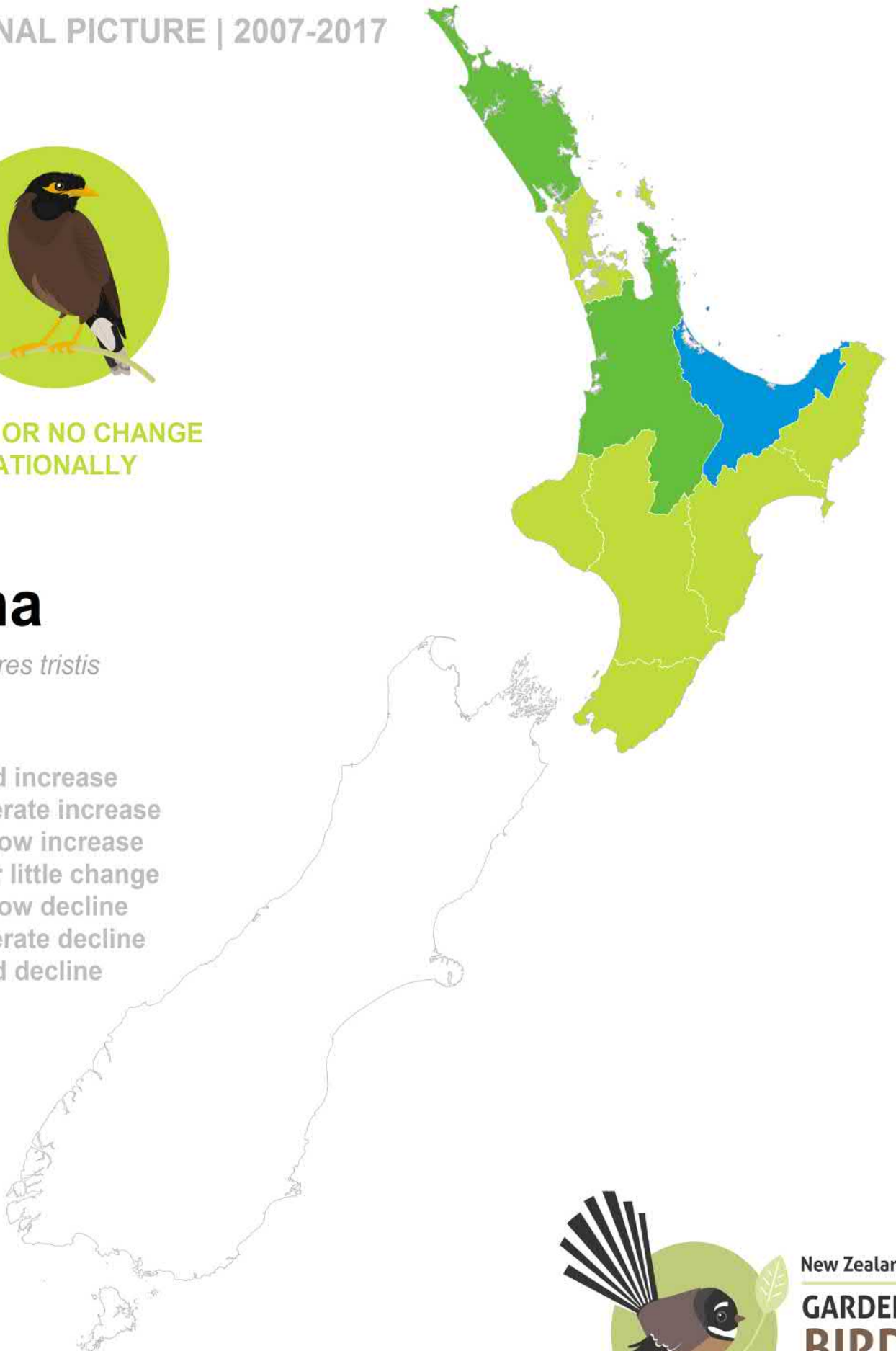


LITTLE OR NO CHANGE  
NATIONALLY

## Myna

*Acridotheres tristis*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

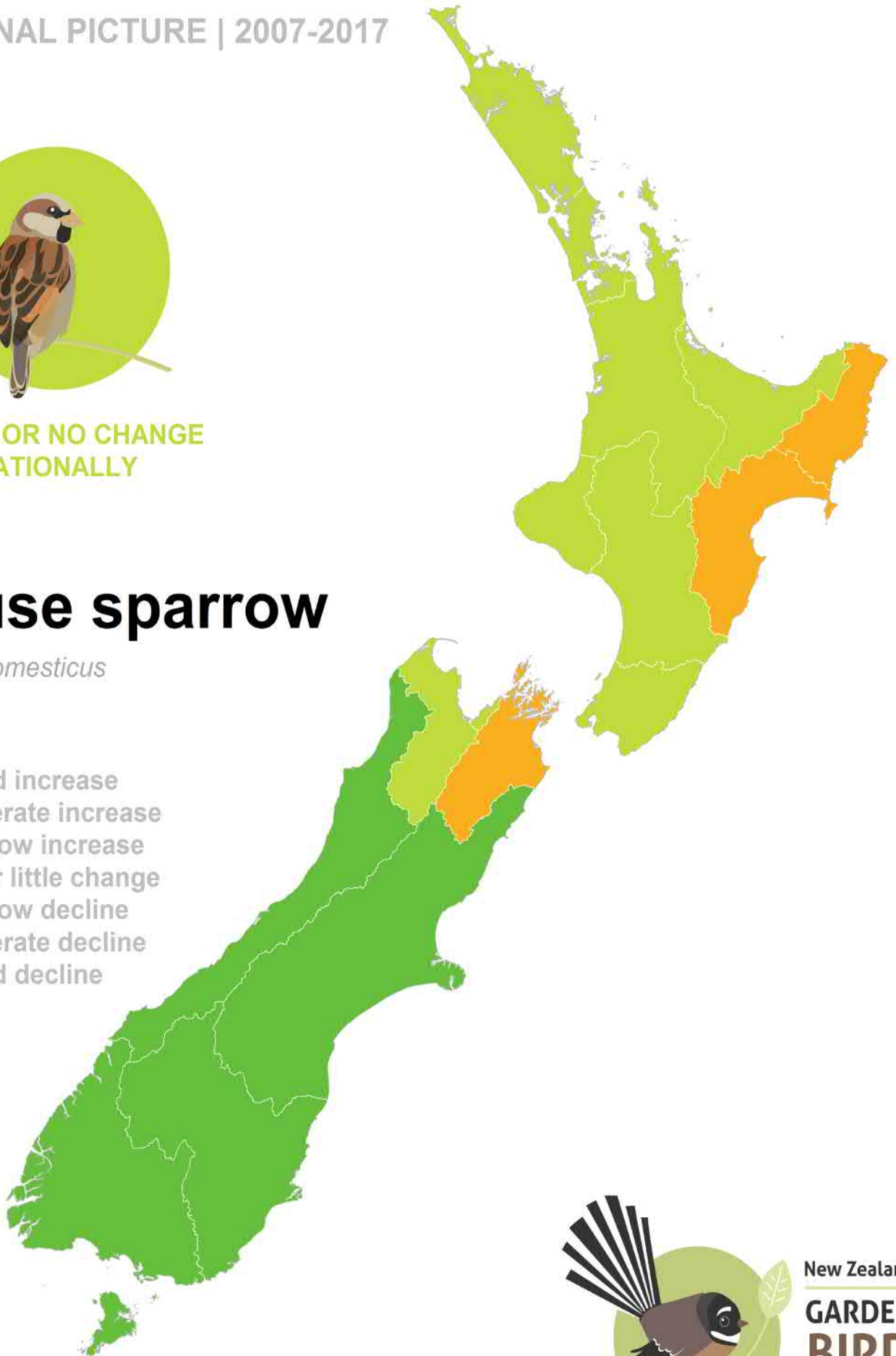


LITTLE OR NO CHANGE  
NATIONALLY

## House sparrow

*Passer domesticus*

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



Data source: 31,679 garden surveys between 2007 and 2017.





# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017



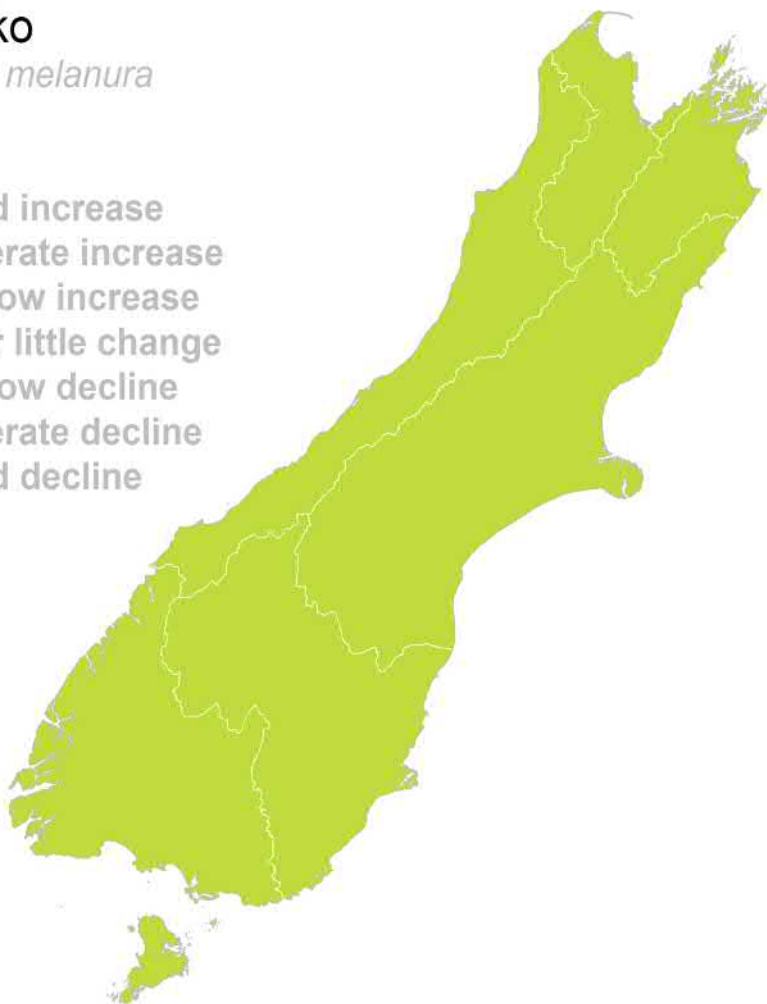
LITTLE OR NO CHANGE  
NATIONALLY

## Bellbird

Korimako

*Anthornis melanura*

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



New Zealand  
**GARDEN  
BIRD  
SURVEY**

Data source: 31,679 garden surveys between 2007 and 2017.

# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

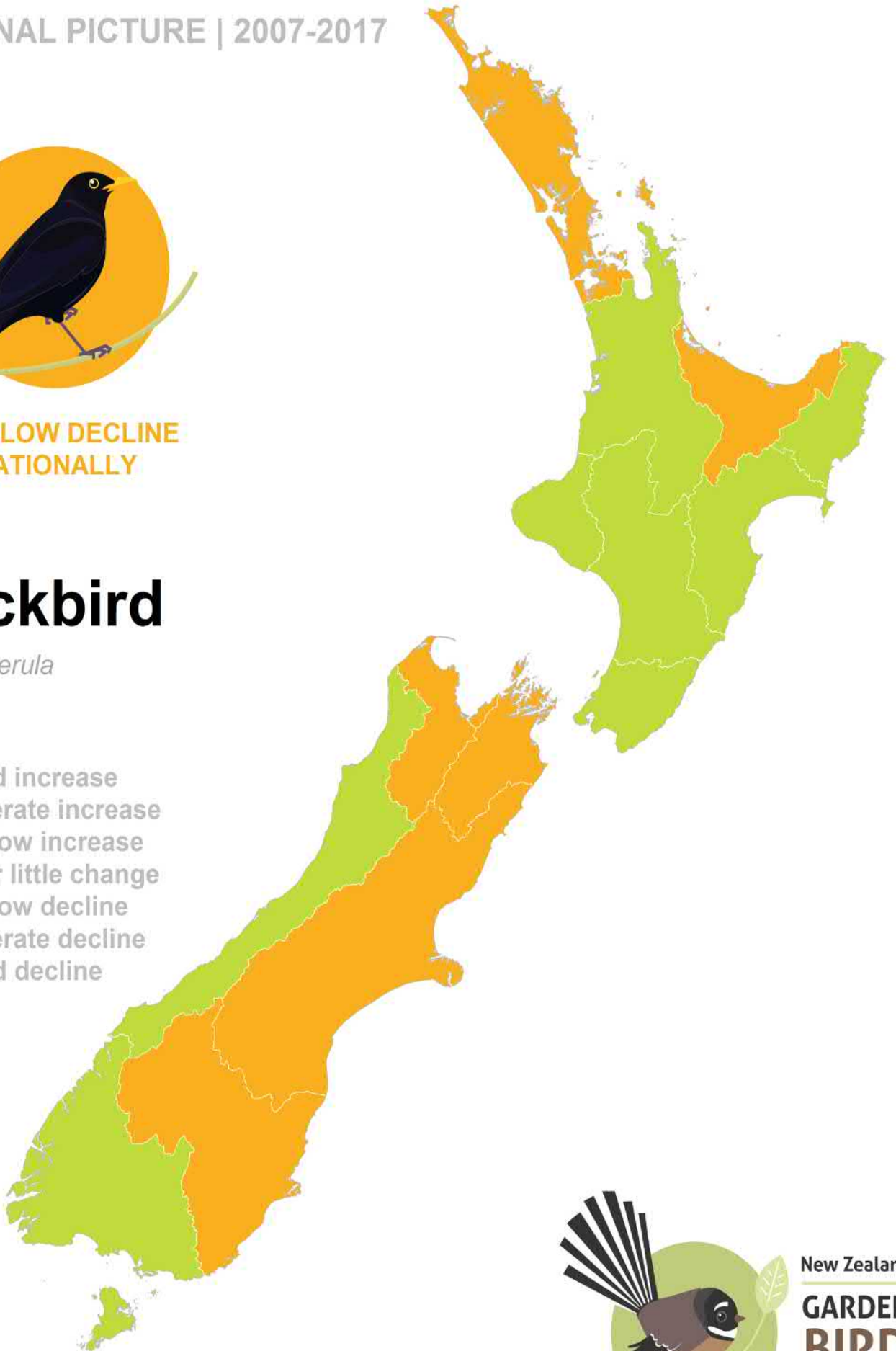


SHALLOW DECLINE  
NATIONALLY

## Blackbird

*Turdus merula*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

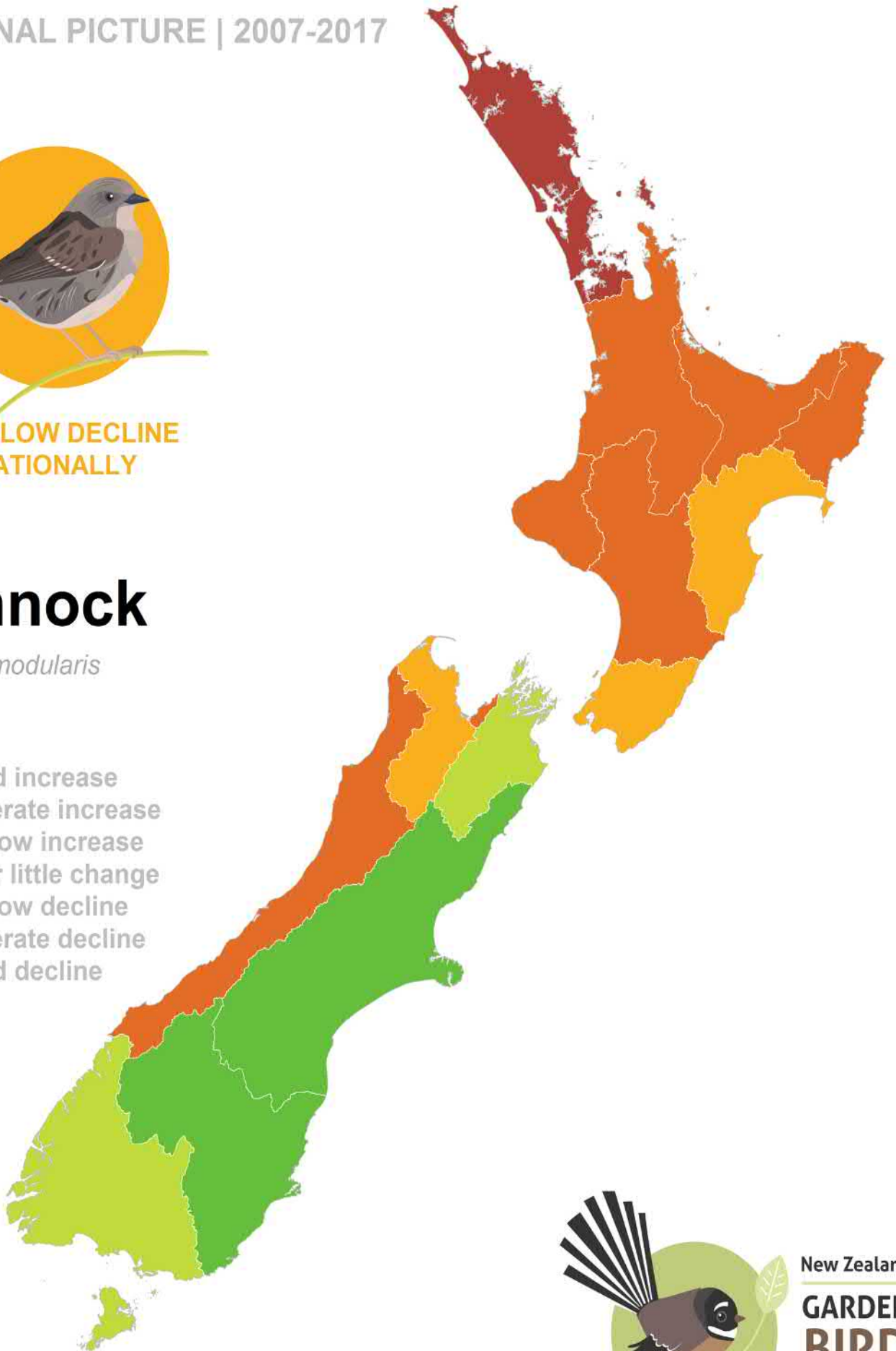


SHALLOW DECLINE  
NATIONALLY

## Dunnock

*Prunella modularis*

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



Data source: 31,679 garden surveys between 2007 and 2017.





# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

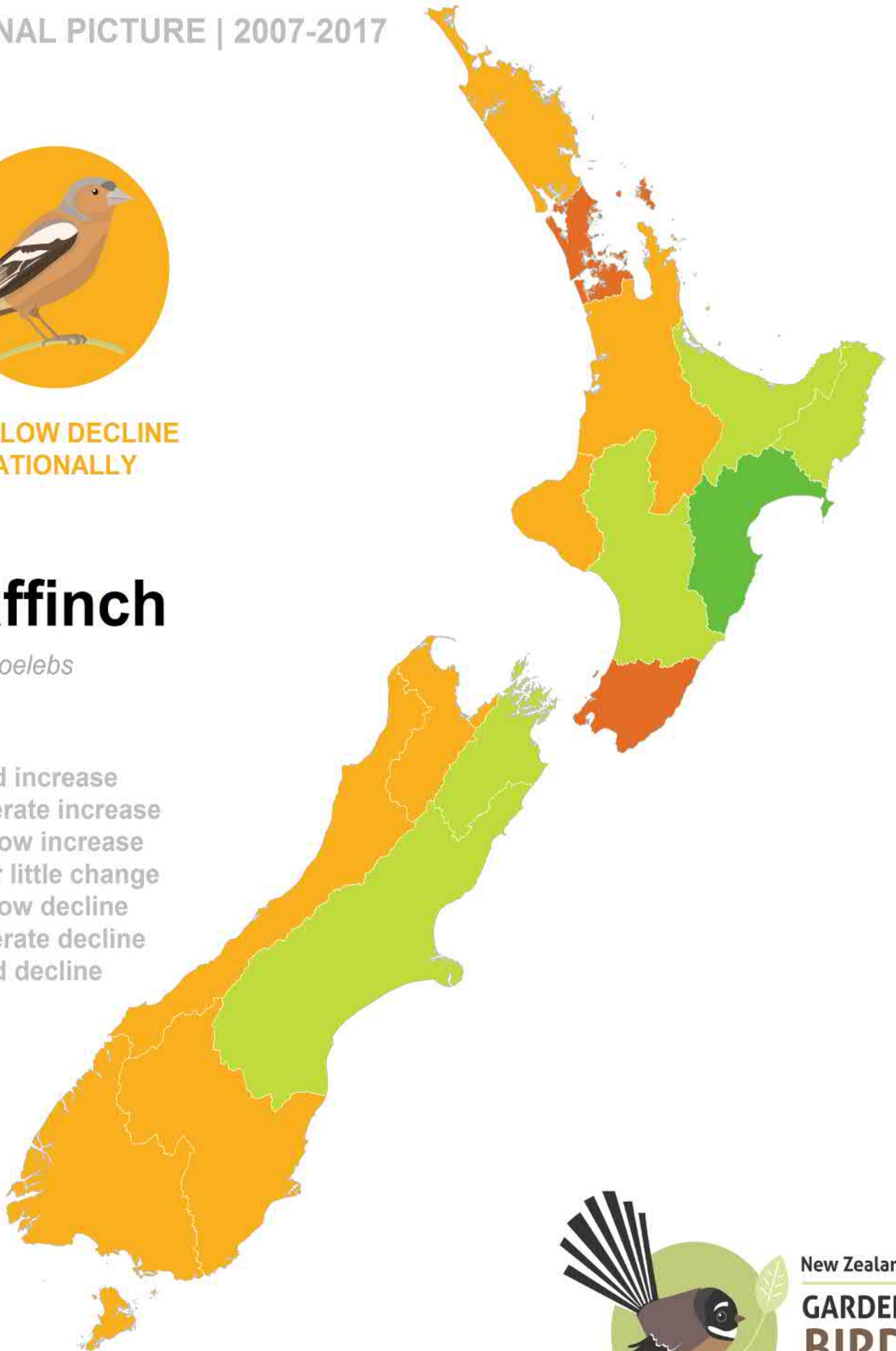


SHALLOW DECLINE  
NATIONALLY

## Chaffinch

*Fringilla coelebs*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

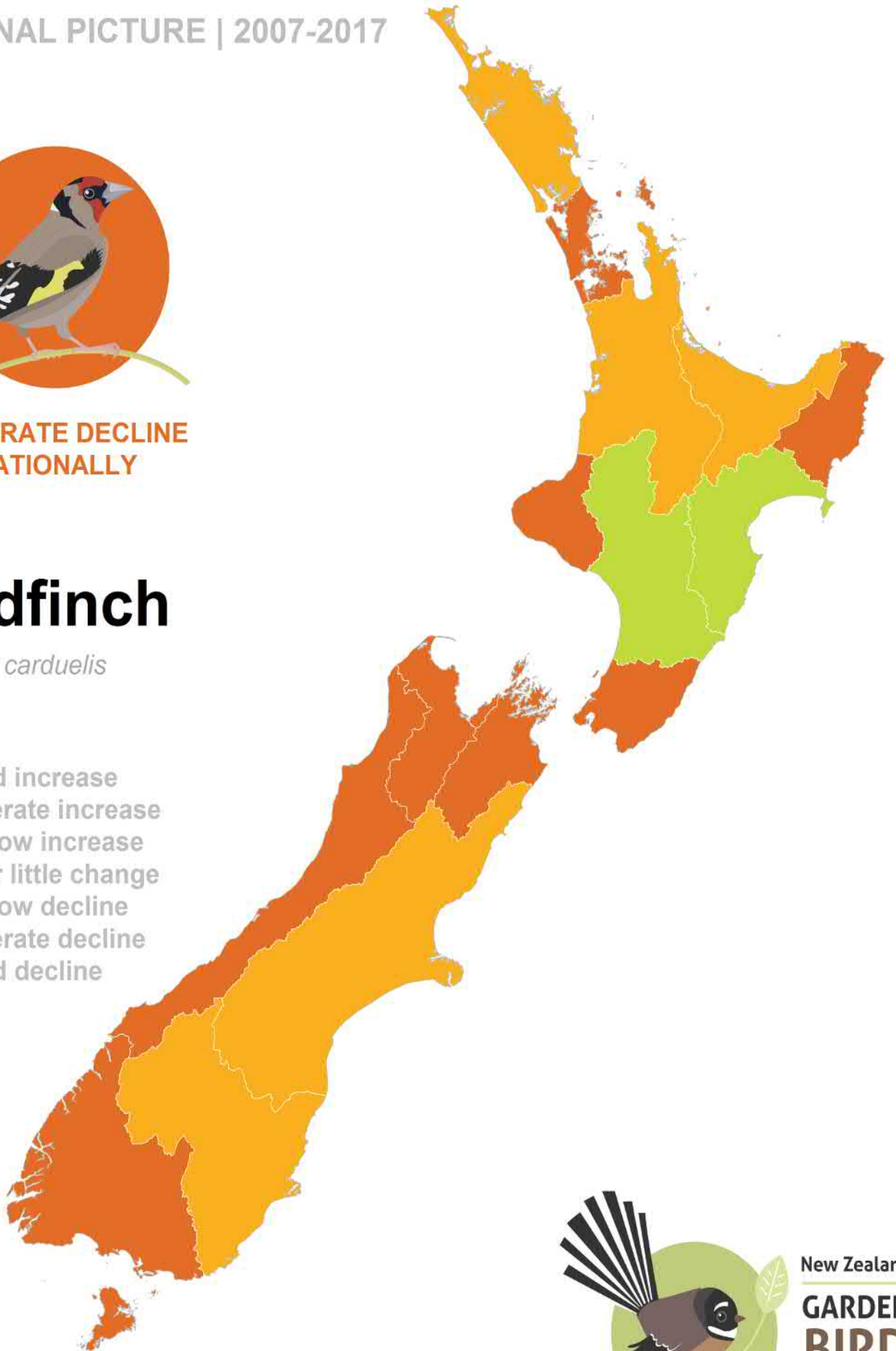


**MODERATE DECLINE  
NATIONALLY**

## Goldfinch

*Carduelis carduelis*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

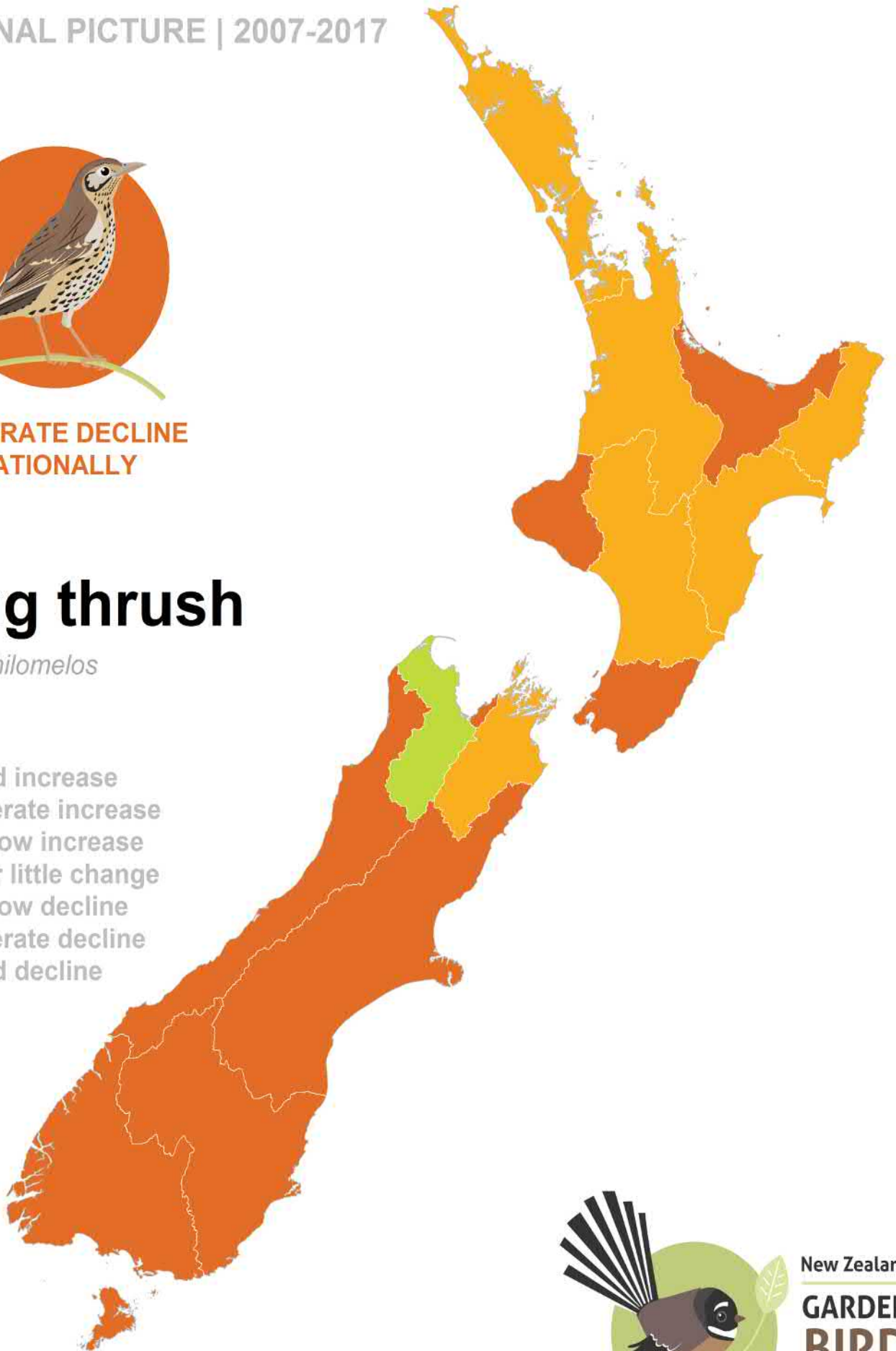


**MODERATE DECLINE  
NATIONALLY**

## Song thrush

*Turdus philomelos*

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



Data source: 31,679 garden surveys between 2007 and 2017.





# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017

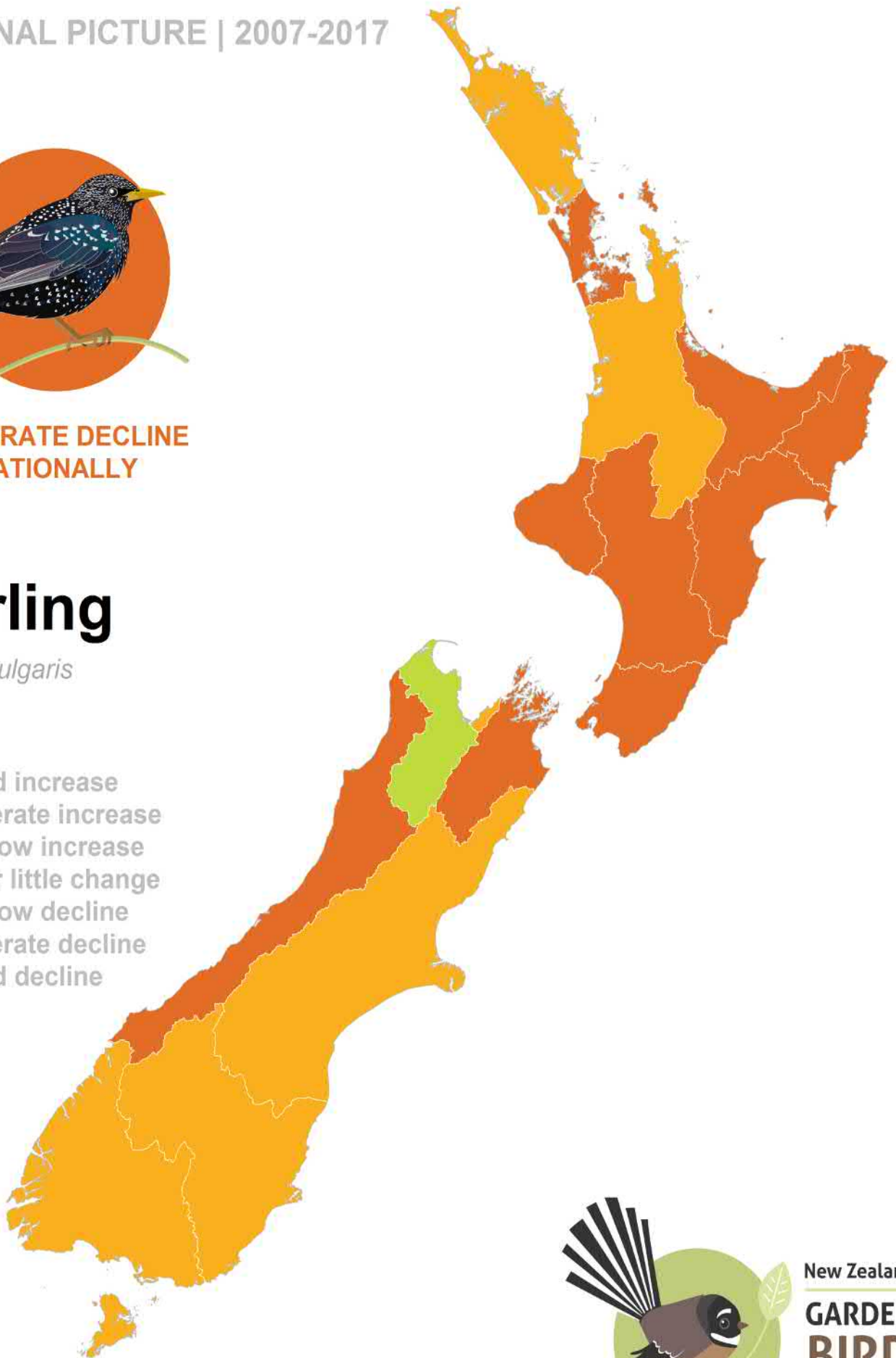


**MODERATE DECLINE  
NATIONALLY**

## Starling

*Sturnus vulgaris*

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



Data source: 31,679 garden surveys between 2007 and 2017.



# How have garden bird counts changed?

REGIONAL PICTURE | 2007-2017



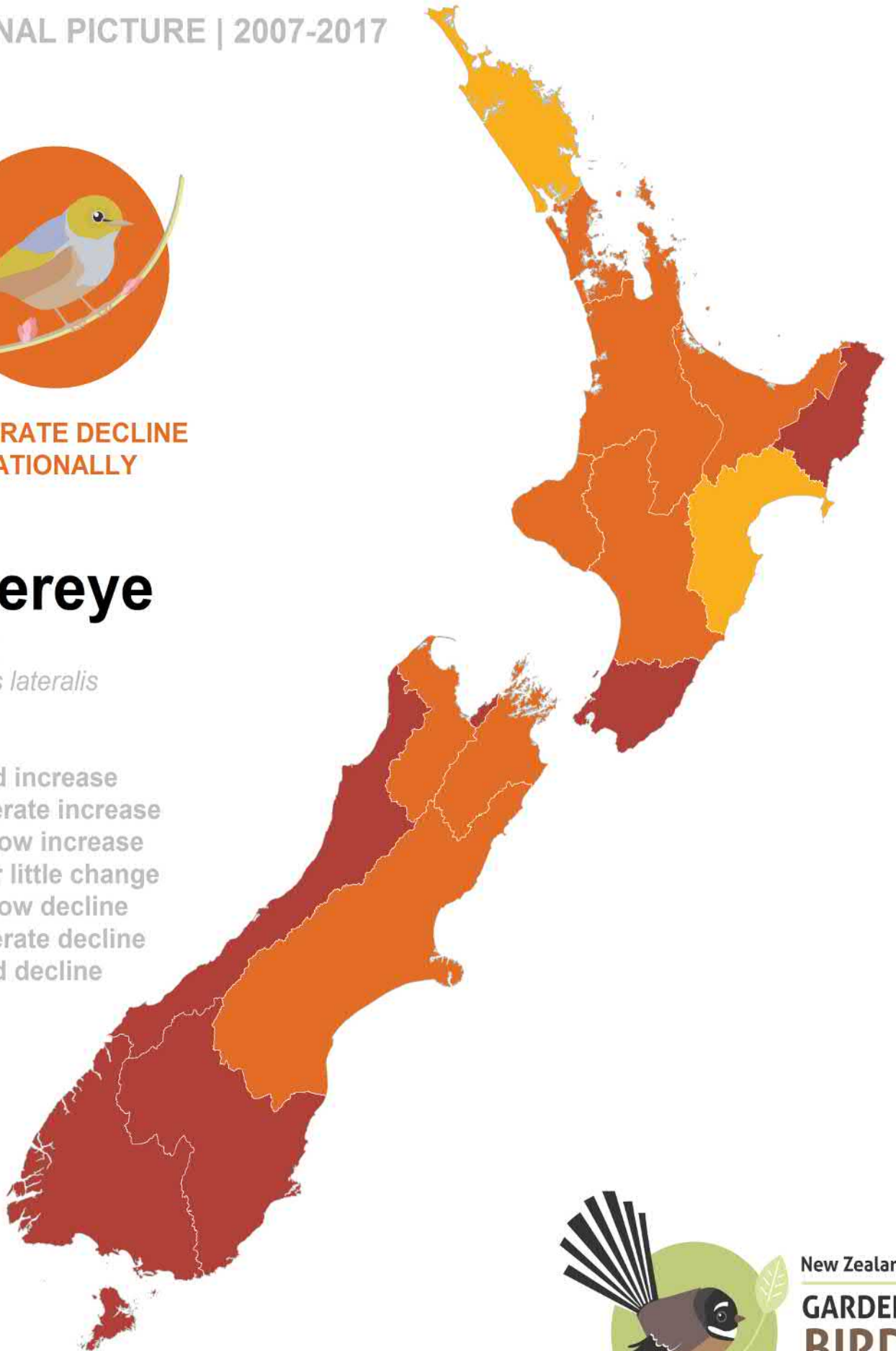
**MODERATE DECLINE  
NATIONALLY**

## Silvereye

Tauhou

*Zosterops lateralis*

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



Data source: 31,679 garden surveys between 2007 and 2017.





New Zealand  
**GARDEN  
BIRD  
SURVEY**

**2018**  
30 June to 8 July

**Visit our webpage to learn more:**  
[gardenbirdsurvey.landcareresearch.co.nz](http://gardenbirdsurvey.landcareresearch.co.nz)

This report should be cited as: MacLeod CJ, Spurr EB, Brandt AJ, Green P. 2018.

State of NZ Garden Birds 2017 | Te Āhua o ngā Manu o te Kāri i Aotearoa

Manaaki Whenua - Landcare Research, Lincoln. ISBN 978-0-947525-43-9.



**Manaaki  
Whenua**  
Landcare  
Research