



New Zealand
**GARDEN
BIRD
SURVEY**



Technical report

MANAWATU-WANGANUI REGION

2017 | State of NZ Garden Birds

Te Āhua o ngā Manu o te Kāri i Aotearoa



**Manaaki
Whenua**
Landcare
Research

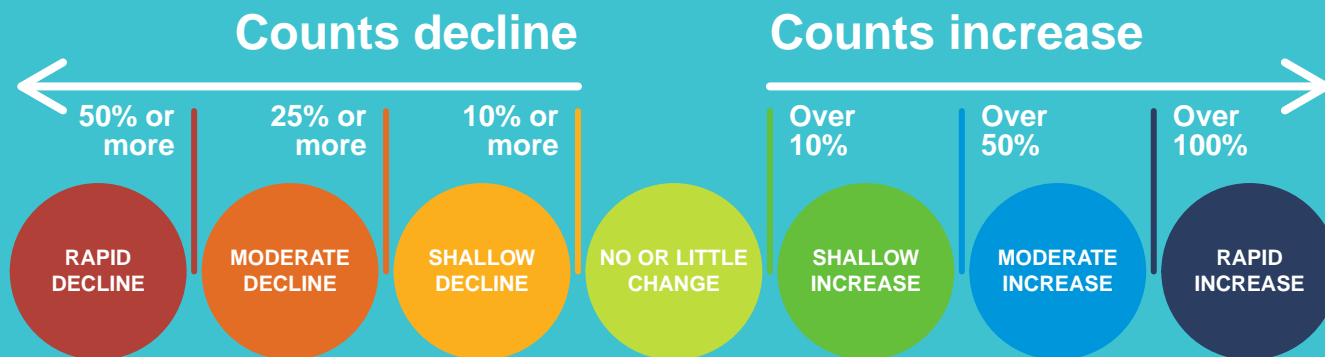


We have estimated how bird counts have changed since 2007 in different regions and towns across New Zealand for 14 common garden visitors – five native and nine introduced birds.

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 adjacent diagram) to help us identify changes of potential concern or interest.

Drawing attention to changes in counts of potential concern or interest



Change class for each species, based on the 1001 bootstrap replicates, indicated by double circle. The degree of shading indicates where these replicates lie.



Quality rating category for each species shows the strength of evidence for the change class based on the 1001 replicates.



How have bird counts changed?

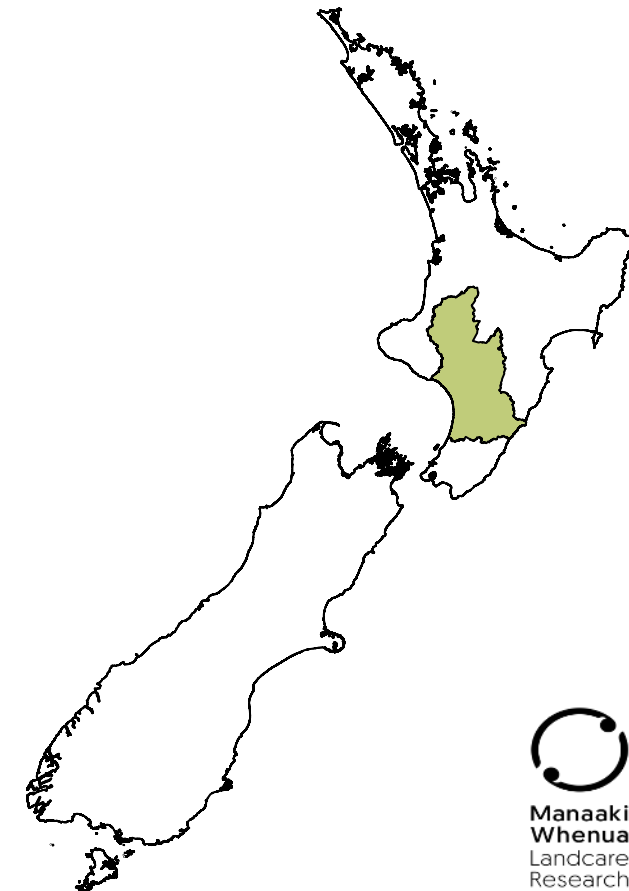
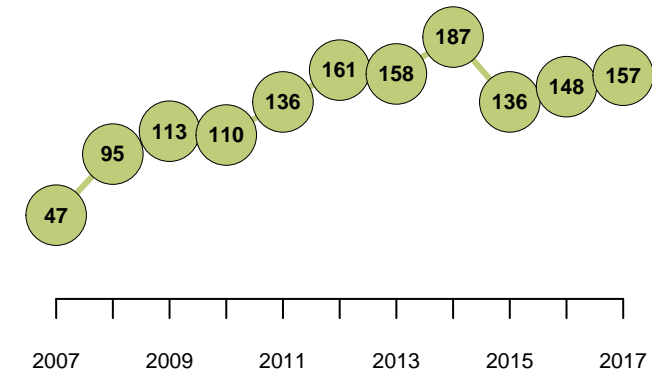
MANAWATU-WANGANUI REGION | 2007-2017



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**GARDEN
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SURVEY**

	Median	80% Confidence Interval	Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	77%	58 to 90%	○	○	○	○	○	●	○	●●●●●	
TUI	9%	5 to 13%	○	○	○	○	○	○	○	●○○○○	KŌKŌ
MYNA	8%	-67 to 47%	○	○	○	○	○	○	○	○○○○○	MAINA
GOLDFINCH	4%	-1 to 10%	○	○	○	○	○	○	○	●●●●○	
FANTAIL	4%	0 to 8%	○	○	○	○	○	○	○	●●●●●	PĪWAIWAKA
HOUSE SPARROW	-1%	-5 to 5%	○	○	○	○	○	○	○	●●●●●	TIU
NEW ZEALAND PIGEON	-4%	-18 to 7%	○	○	○	○	○	○	○	●●○○○	KERERŪ
BLACKBIRD	-7%	-10 to -4%	○	○	○	○	○	○	○	●●●●○	MANU PANGO
CHAFFINCH	-9%	-13 to -5%	○	○	○	○	○	○	○	●○○○○	PAHIRINI
SONG THRUSH	-15%	-20 to -11%	○	○	○	○	○	○	○	●●●●●	
BELLBIRD	-19%	-25 to -11%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
STARLING	-28%	-34 to -24%	○	○	○	○	○	○	○	●●●●○	TĀRINGI
DUNNOCK	-30%	-37 to -22%	○	○	○	○	○	○	○	●●●●○	
SILVEREYE	-40%	-44 to -37%	○	○	○	○	○	○	○	●●●●○	TAUHOU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

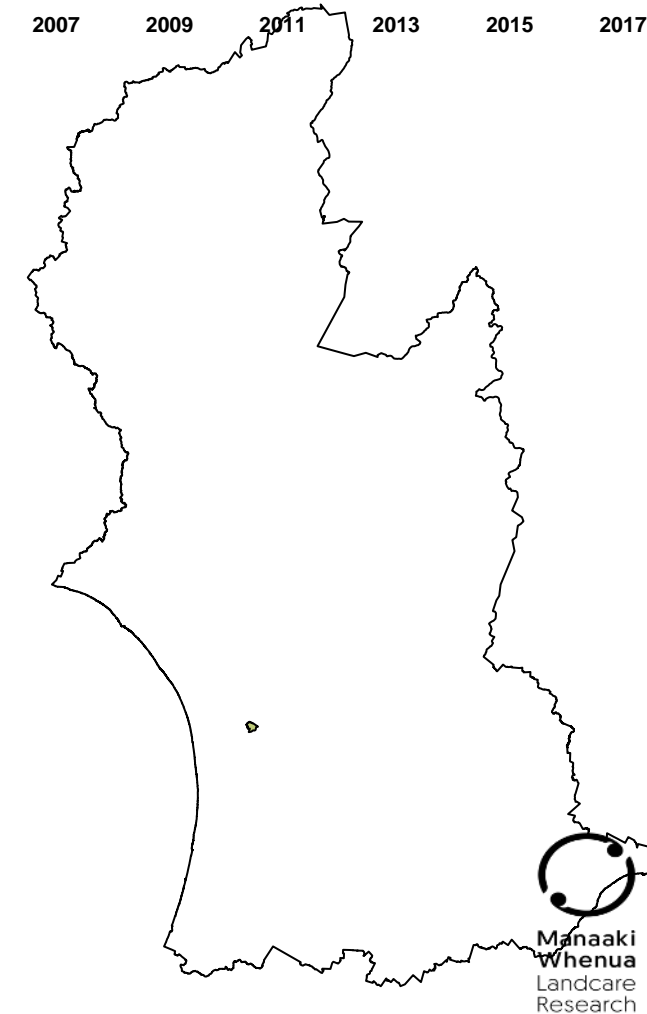
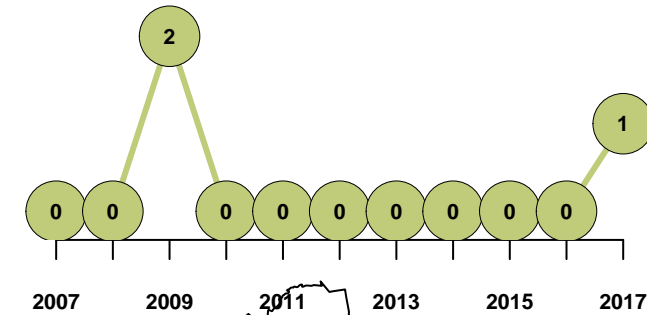


New Zealand
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Bulls

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	67%	46	to 81%	○	○	○	○	○	●	○	●●●●○	
TUI	9%	1	to 15%	○	○	○	○	○	○	○	●○○○○	KŌKŌ
NEW ZEALAND PIGEON	5%	-21	to 28%	○	○	○	○	○	○	○	○○○○○	KERERŪ
FANTAIL	4%	0	to 8%	○	○	○	○	○	○	○	●●●●●	PĪWAIWAKA
MYNA	-5%	-88	to 34%	○	○	○	○	○	○	○	○○○○○	MAINA
GOLDFINCH	-5%	-11	to 0%	○	○	○	○	○	○	○	●●●●○	
HOUSE SPARROW	-6%	-10	to 0%	○	○	○	○	○	○	○	●●●●○	TIU
BLACKBIRD	-6%	-9	to -4%	○	○	○	○	○	○	○	●●●●●	MANU PANGO
SONG THRUSH	-14%	-20	to -9%	○	○	○	○	○	○	○	●●●●○	
CHAFFINCH	-18%	-22	to -13%	○	○	○	○	○	○	○	●●●●●	PAHIRINI
BELLBIRD	-23%	-33	to -13%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
STARLING	-27%	-33	to -23%	○	○	○	○	○	○	○	●●●●○	TĀRINGI
DUNNOCK	-32%	-40	to -24%	○	○	○	○	○	○	○	●●●●○	
SILVEREYE	-34%	-38	to -32%	○	○	○	○	○	○	○	●●●●○	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

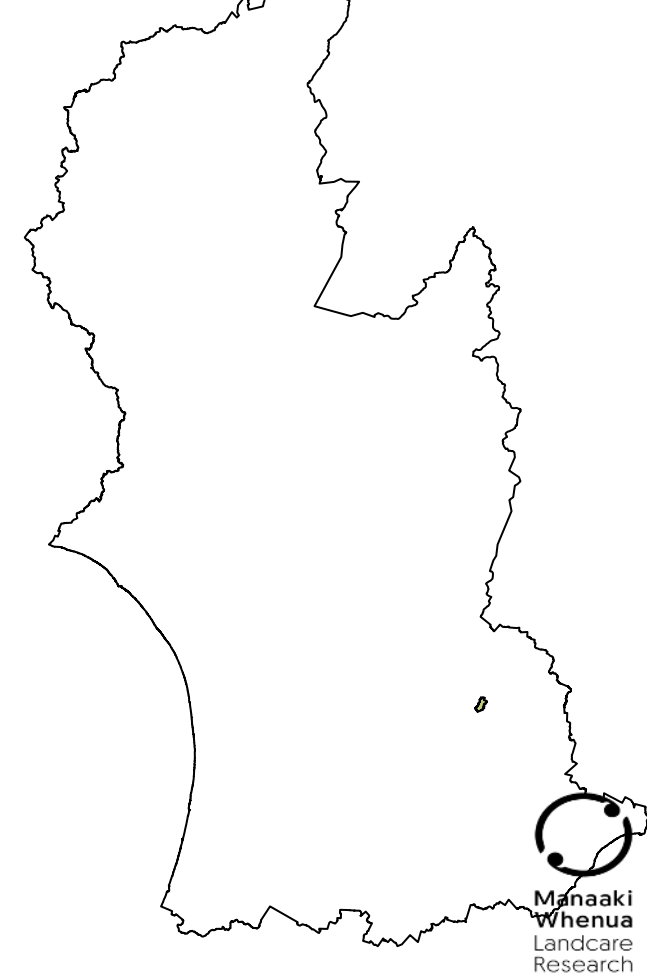
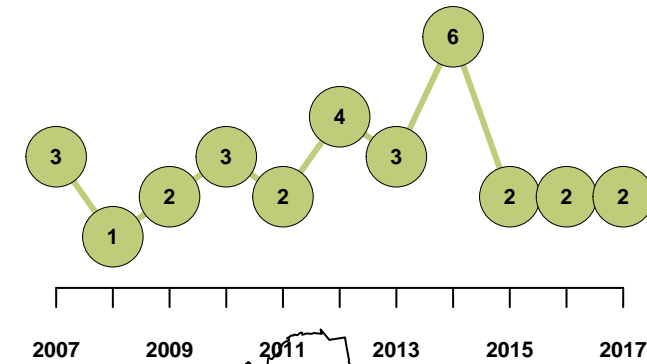
Dannevirke

	Median	80% Confidence Interval	Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	85%	66 to 99%	○	○	○	○	○	●	○	●●●●●	
MYNA	42%	-36 to 81%	○	○	○	○	○	○	○	●●●●○	MAINA
NEW ZEALAND PIGEON	29%	-6 to 56%	○	○	○	○	○	○	○	●●●●○	KERERŪ
FANTAIL	6%	0 to 11%	○	○	○	○	○	○	○	●●●●○	PĪWAIWAKA
GOLDFINCH	4%	-1 to 10%	○	○	○	○	○	○	○	●●●●○	
TUI	-3%	-13 to 4%	○	○	○	○	○	○	○	●●●●○	KŌKŌ
HOUSE SPARROW	-9%	-13 to -2%	○	○	○	○	○	○	○	●●●●○	TIU
BLACKBIRD	-9%	-12 to -7%	○	○	○	○	○	○	○	●●●●○	MANU PANGO
CHAFFINCH	-12%	-17 to -8%	○	○	○	○	○	○	○	●●●●○	PAHIRINI
BELLBIRD	-21%	-29 to -13%	○	○	○	○	○	○	○	●●●●○	KORIMAKO
SONG THRUSH	-22%	-28 to -17%	○	○	○	○	○	○	○	●●●●○	
DUNNOCK	-24%	-32 to -15%	○	○	○	○	○	○	○	●●●●○	
STARLING	-30%	-36 to -26%	○	○	○	○	○	○	○	●●●●○	TĀRINGI
SILVEREYE	-50%	-54 to -47%	○	○	○	○	○	○	○	●●●●○	TAUHOHU



New Zealand
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NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

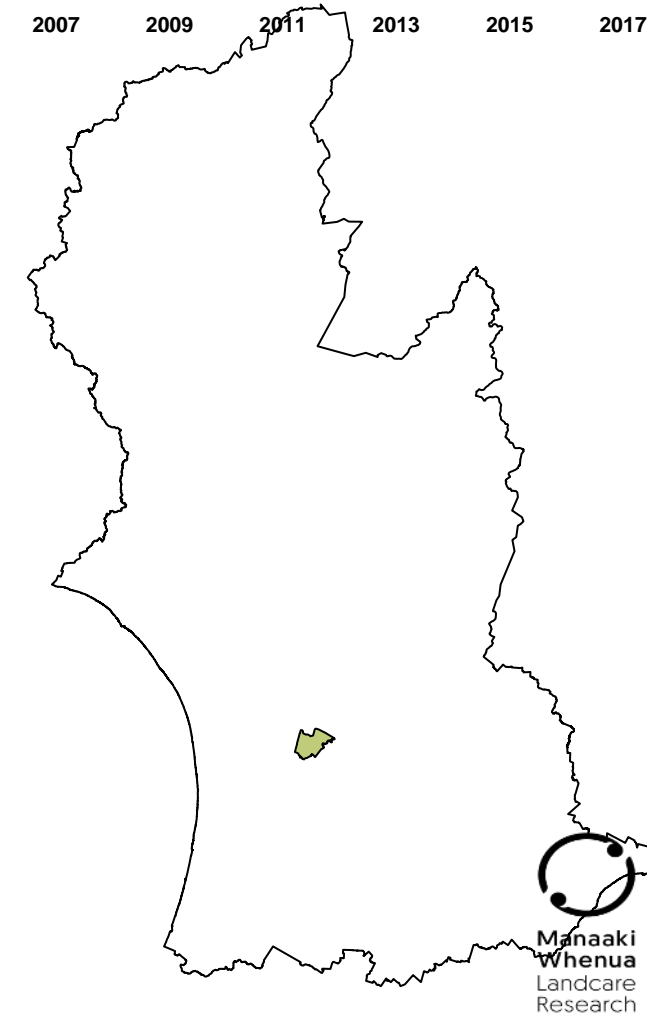
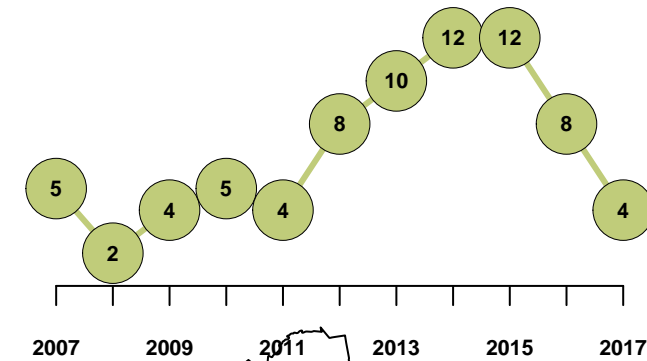


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Feilding

	Median	80% Confidence Interval	Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	75%	56 to 88%	○	○	○	○	○	●	○	●●●●●	
NEW ZEALAND PIGEON	12%	-22 to 35%	○	○	○	○	●	○	○	●○○○○	KERERŪ
FANTAIL	6%	0 to 11%	○	○	○	○	○	○	○	●●●●○	PĪWAIWAKA
GOLDFINCH	-3%	-9 to 1%	○	○	○	○	○	○	○	●●●●●	
BLACKBIRD	-5%	-8 to -2%	○	○	○	○	○	○	○	●●●●●	MANU PANGO
TUI	-6%	-16 to 0%	○	○	○	○	○	○	○	●●○○○	KŌKŌ
HOUSE SPARROW	-9%	-13 to -2%	○	○	○	○	○	○	○	●○○○○	TIU
MYNA	-10%	-95 to 28%	○	○	○	○	○	○	○	●○○○○	MAINA
CHAFFINCH	-16%	-20 to -11%	○	○	○	○	○	○	○	●●●●●	PAHIRINI
STARLING	-21%	-27 to -17%	○	○	○	○	○	○	○	●●●●●	TĀRINGI
SONG THRUSH	-22%	-27 to -16%	○	○	○	○	○	○	○	●●●●●	
BELLBIRD	-23%	-34 to -12%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
DUNNOCK	-30%	-38 to -22%	○	○	○	○	○	○	○	●●●○○	
SILVEREYE	-33%	-37 to -31%	○	○	○	○	○	○	○	●●●●●	TAUHOHU

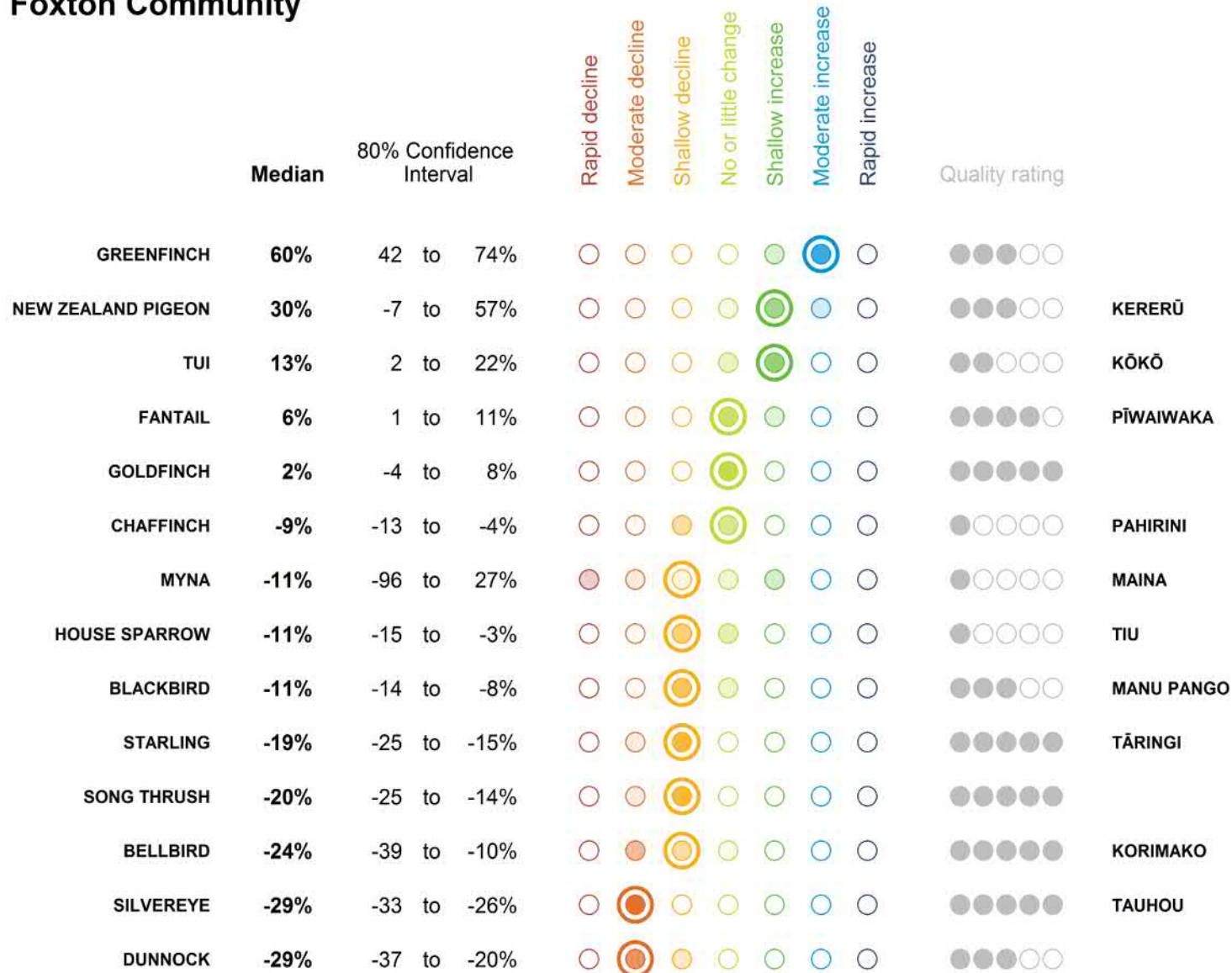
NUMBER OF GARDEN SURVEYS



How have bird counts changed?

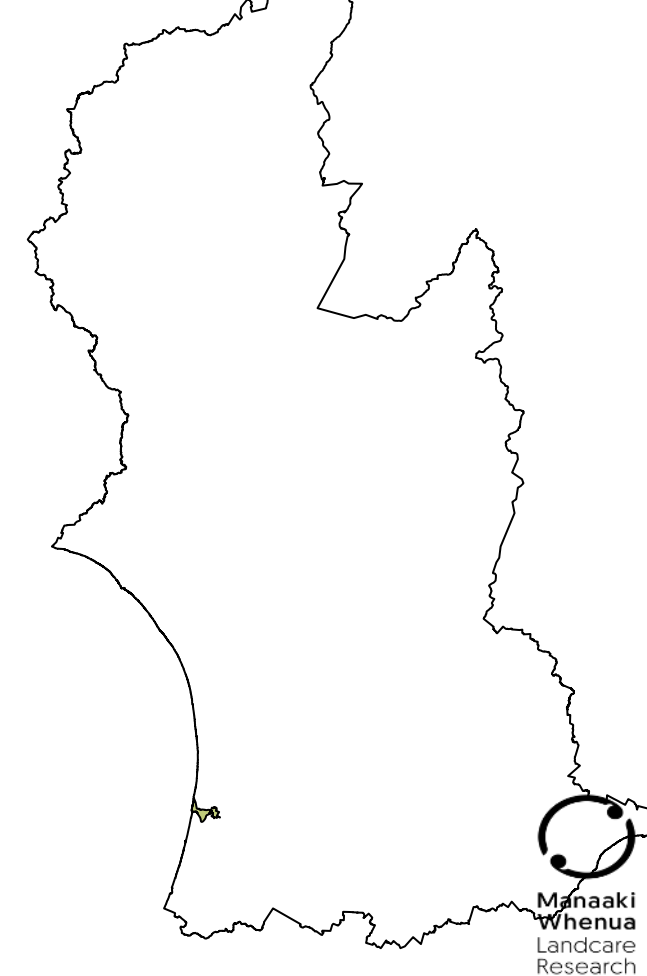
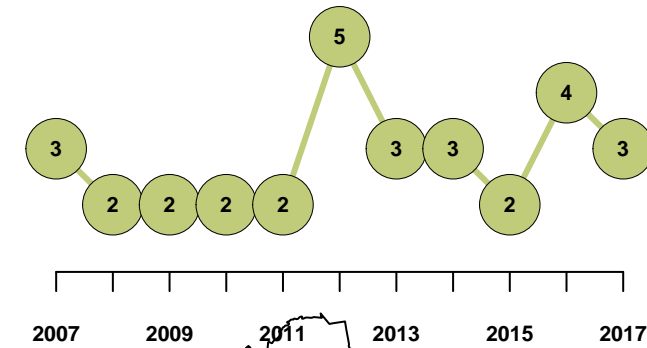
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Foxton Community



New Zealand
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BIRD
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NUMBER OF GARDEN SURVEYS



How have bird counts changed?

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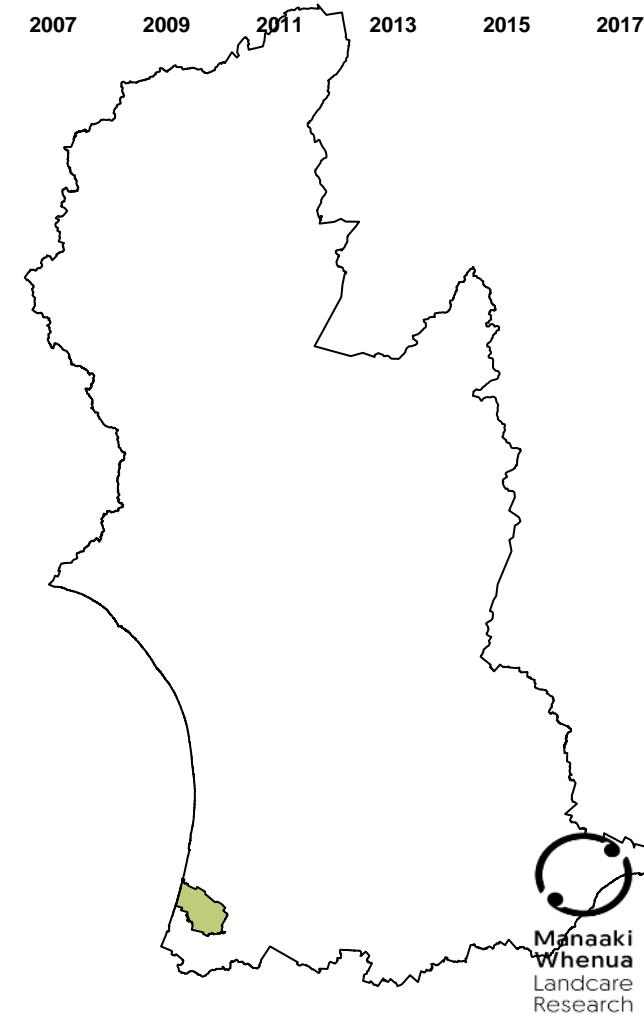
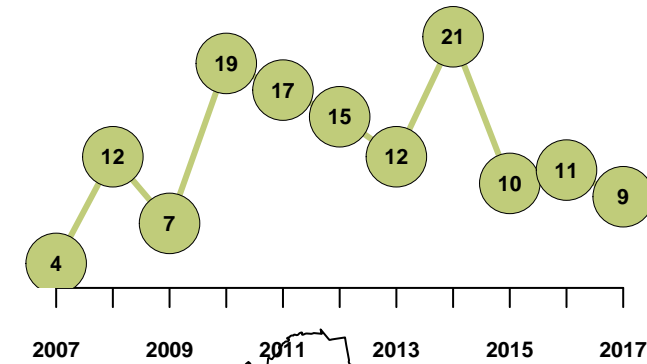


New Zealand
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Levin

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	67%	49	to 80%	○	○	○	○	○	●	○	●●●●○	
FANTAIL	7%	1	to 13%	○	○	○	●	○	○	○	●●○○○	PĪWAIWAKA
GOLDFINCH	6%	0	to 12%	○	○	○	●	○	○	○	●●●○○	
TUI	2%	-3	to 8%	○	○	○	●	○	○	○	●●●●●	KŌKŌ
SONG THRUSH	-5%	-11	to 0%	○	○	○	●	○	○	○	●●●●○	
NEW ZEALAND PIGEON	-10%	-29	to 6%	○	○	○	○	○	○	○	●○○○○	KERERŪ
HOUSE SPARROW	-14%	-19	to -6%	○	○	○	○	○	○	○	●●●○○	TIU
BLACKBIRD	-14%	-17	to -11%	○	○	○	○	○	○	○	●●●●●	MANU PANGO
MYNA	-20%	-108	to 18%	○	○	○	○	○	○	○	●●○○○	MAINA
CHAFFINCH	-21%	-26	to -17%	○	○	○	○	○	○	○	●●●●●	PAHIRINI
BELLBIRD	-22%	-34	to -11%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
STARLING	-32%	-38	to -27%	○	○	○	○	○	○	○	●●●●●	TĀRINGI
DUNNOCK	-34%	-43	to -25%	○	○	○	○	○	○	○	●●●●●	
SILVEREYE	-47%	-51	to -44%	○	○	○	○	○	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

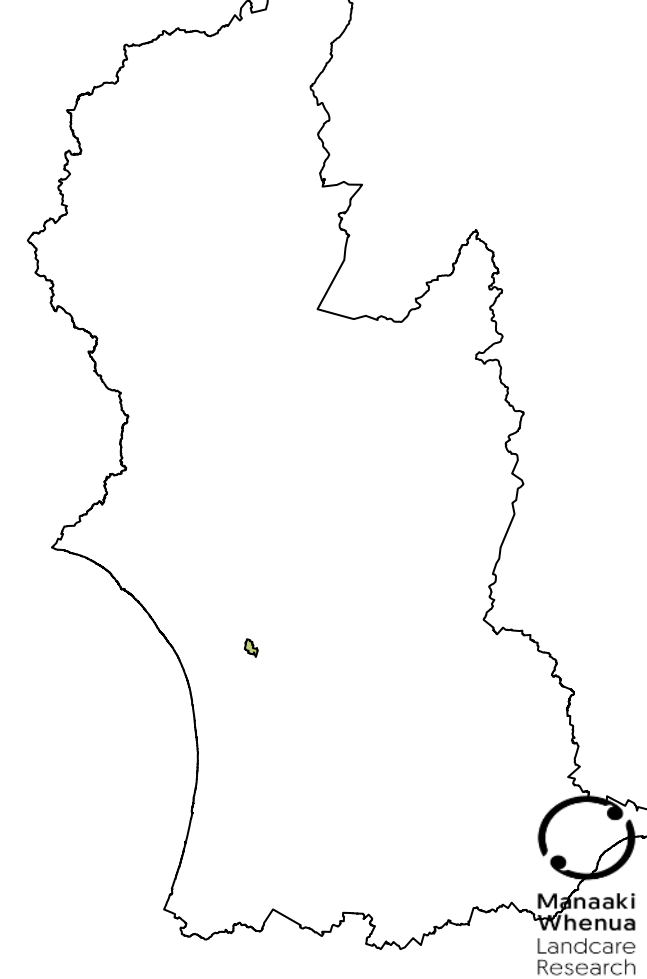
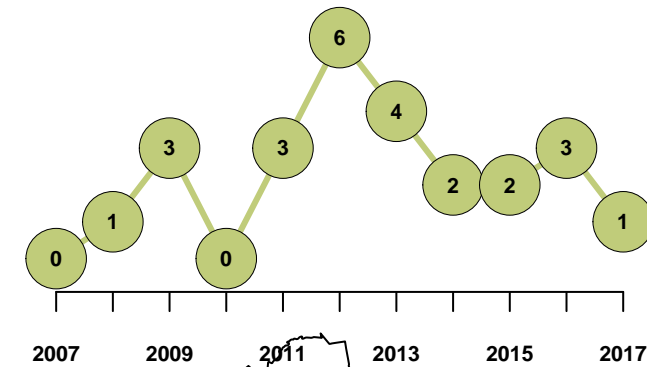


New Zealand
**GARDEN
BIRD
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Marton

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	79%	60	to 94%	○	○	○	○	○	●	○	●●●●●	
MYNA	13%	-71	to 52%	○	○	○	○	○	○	○	●○○○○	MAINA
GOLDFINCH	10%	3	to 15%	○	○	○	○	○	○	○	○○○○○	
TUI	7%	0	to 14%	○	○	○	○	○	○	○	●●○○○	KŌKŌ
FANTAIL	6%	0	to 11%	○	○	○	○	○	○	○	●●●●○	PĪWAIWAKA
HOUSE SPARROW	3%	0	to 11%	○	○	○	○	○	○	○	●●●●○	TIU
NEW ZEALAND PIGEON	0%	-23	to 14%	○	○	○	○	○	○	○	●○○○○	KERERŪ
BLACKBIRD	-2%	-6	to 0%	○	○	○	○	○	○	○	●●●●●	MANU PANGO
CHAFFINCH	-11%	-16	to -6%	○	○	○	○	○	○	○	●●○○○	PAHIRINI
STARLING	-13%	-19	to -8%	○	○	○	○	○	○	○	●●●●○	TĀRINGI
SONG THRUSH	-14%	-20	to -8%	○	○	○	○	○	○	○	●●●●○	
BELLBIRD	-22%	-31	to -13%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
DUNNOCK	-37%	-46	to -29%	○	○	○	○	○	○	○	●●●●●	
SILVEREYE	-39%	-42	to -36%	○	○	○	○	○	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

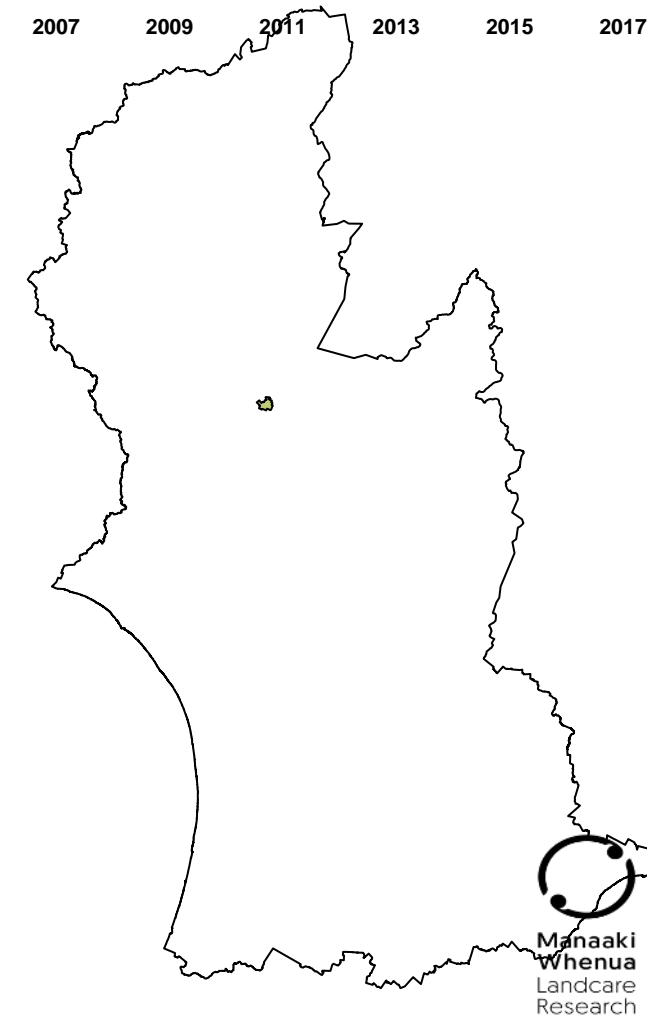
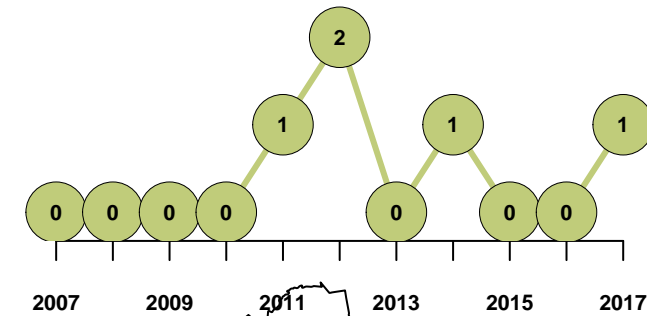


New Zealand
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Ohakune

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	49%	31	to 62%	○	○	○	○	●	●	○	●●●●●	
TUI	9%	0	to 16%	○	○	○	●	●	○	○	●○○○○	KŌKŌ
GOLDFINCH	6%	0	to 11%	○	○	○	●	●	○	○	●●●○○	
FANTAIL	6%	0	to 11%	○	○	○	●	●	○	○	●●●●○	PĪWAIWAKA
CHAFFINCH	-3%	-7	to 0%	○	○	○	●	●	○	○	●●●●●	PAHIRINI
MYNA	-5%	-89	to 33%	○	○	○	●	●	○	○	○○○○○	MAINA
BLACKBIRD	-8%	-11	to -5%	○	○	○	●	●	○	○	●●●●○	MANU PANGO
HOUSE SPARROW	-9%	-13	to -1%	○	○	○	●	●	○	○	●○○○○	TIU
SONG THRUSH	-10%	-16	to -6%	○	○	○	●	●	○	○	●○○○○	
NEW ZEALAND PIGEON	-12%	-34	to 0%	○	○	○	●	●	○	○	●●○○○	KERERŪ
DUNNOCK	-12%	-20	to -4%	○	○	○	●	●	○	○	●●○○○	
BELLBIRD	-16%	-23	to -8%	○	○	○	●	●	○	○	●●●●○	KORIMAKO
STARLING	-30%	-35	to -26%	○	○	○	●	●	○	○	●●●●●	TĀRINGI
SILVEREYE	-44%	-48	to -41%	○	○	○	●	●	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



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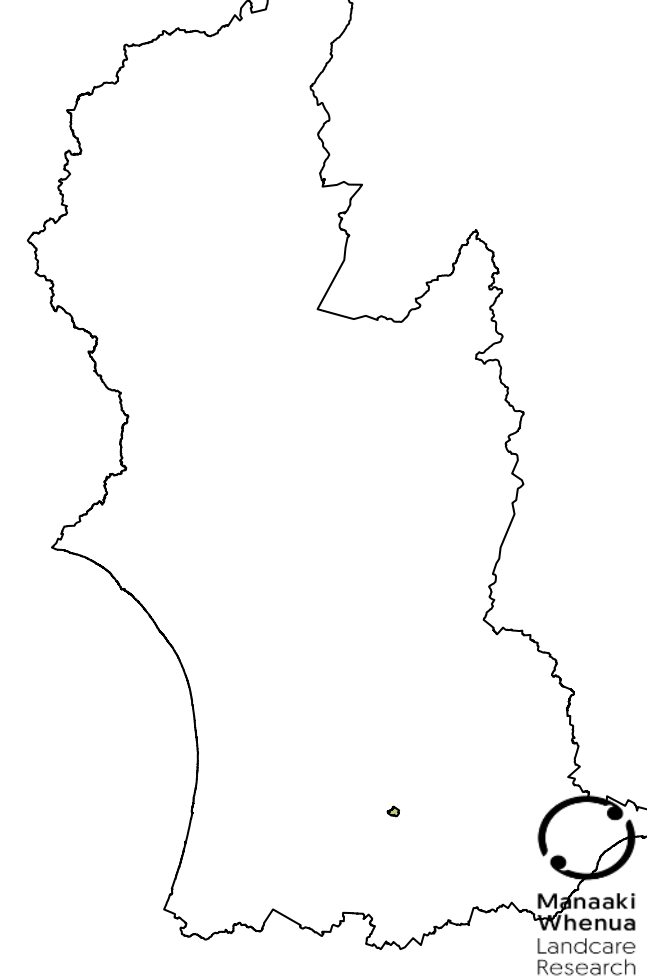
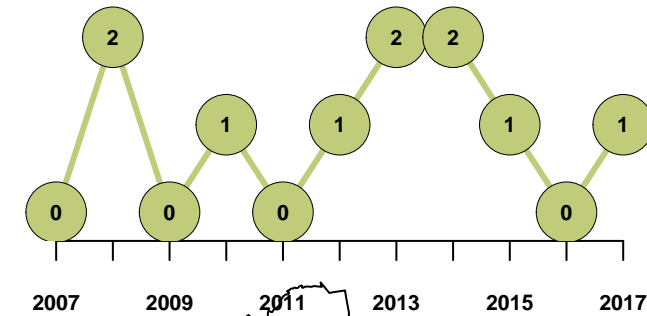


New Zealand
**GARDEN
BIRD
SURVEY**

Pahiatua

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	68%	49	to 82%	○	○	○	○	○	●	○	●●●●○	
MYNA	5%	-78	to 45%	○	○	○	○	○	○	○	○●○○○	MAINA
FANTAIL	4%	0	to 9%	○	○	○	○	○	○	○	●●●●●	PĪWAIWAKA
GOLDFINCH	2%	-3	to 8%	○	○	○	○	○	○	○	●●●●●	
TUI	0%	-8	to 6%	○	○	○	○	○	○	○	●●●●●	KŌKŌ
NEW ZEALAND PIGEON	-8%	-41	to 10%	○	○	○	○	○	○	○	○●○○○	KERERŪ
HOUSE SPARROW	-8%	-12	to 0%	○	○	○	○	○	○	○	●●○○○	TIU
BLACKBIRD	-8%	-11	to -5%	○	○	○	○	○	○	○	●●●●○	MANU PANGO
CHAFFINCH	-9%	-13	to -4%	○	○	○	○	○	○	○	●●○○○	PAHIRINI
SONG THRUSH	-13%	-20	to -8%	○	○	○	○	○	○	○	●●●●○	
BELLBIRD	-13%	-20	to -6%	○	○	○	○	○	○	○	●●●○○	KORIMAKO
STARLING	-20%	-25	to -15%	○	○	○	○	○	○	○	●●●●○	TĀRINGI
DUNNOCK	-24%	-32	to -16%	○	○	○	○	○	○	○	●●●●○	
SILVEREYE	-41%	-45	to -39%	○	○	○	○	○	○	○	●●●●○	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

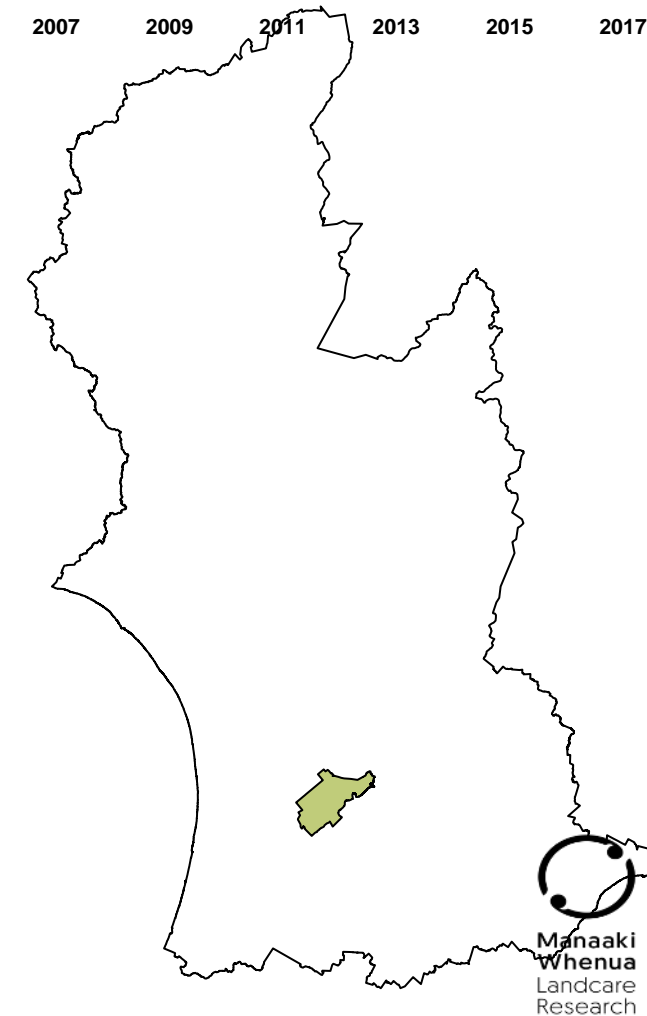
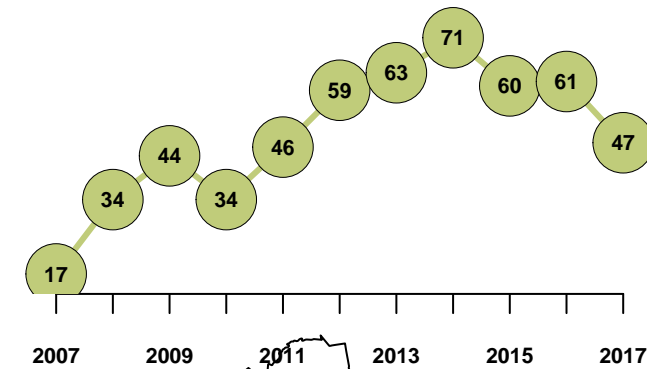
Palmerston North



New Zealand
**GARDEN
BIRD
SURVEY**

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	78%	60	to 92%	○	○	○	○	○	●	○	●●●●●	
TUI	40%	34	to 46%	○	○	○	○	●	○	○	●●●●●	KŌKŌ
NEW ZEALAND PIGEON	15%	-11	to 34%	○	○	○	○	●	○	○	●●○○○	KERERŪ
HOUSE SPARROW	14%	9	to 21%	○	○	○	○	●	○	○	●●●●○	TIU
GOLDFINCH	13%	6	to 19%	○	○	○	○	●	○	○	●●●○○	
FANTAIL	4%	-1	to 9%	○	○	○	○	●	○	○	●●●●●	PĪWAIWAKA
CHAFFINCH	-4%	-9	to 0%	○	○	○	○	●	○	○	●●●●●	PAHIRINI
BLACKBIRD	-5%	-8	to -2%	○	○	○	○	●	○	○	●●●●●	MANU PANGO
SONG THRUSH	-18%	-23	to -13%	○	○	○	○	○	○	○	●●●●●	
MYNA	-20%	-116	to 17%	○	○	○	○	○	○	○	●●○○○	MAINA
BELLBIRD	-21%	-30	to -12%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
DUNNOCK	-31%	-39	to -22%	○	○	○	○	○	○	○	●●●●○	
STARLING	-32%	-38	to -28%	○	○	○	○	○	○	○	●●●●●	TĀRINGI
SILVEREYE	-39%	-43	to -36%	○	○	○	○	○	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

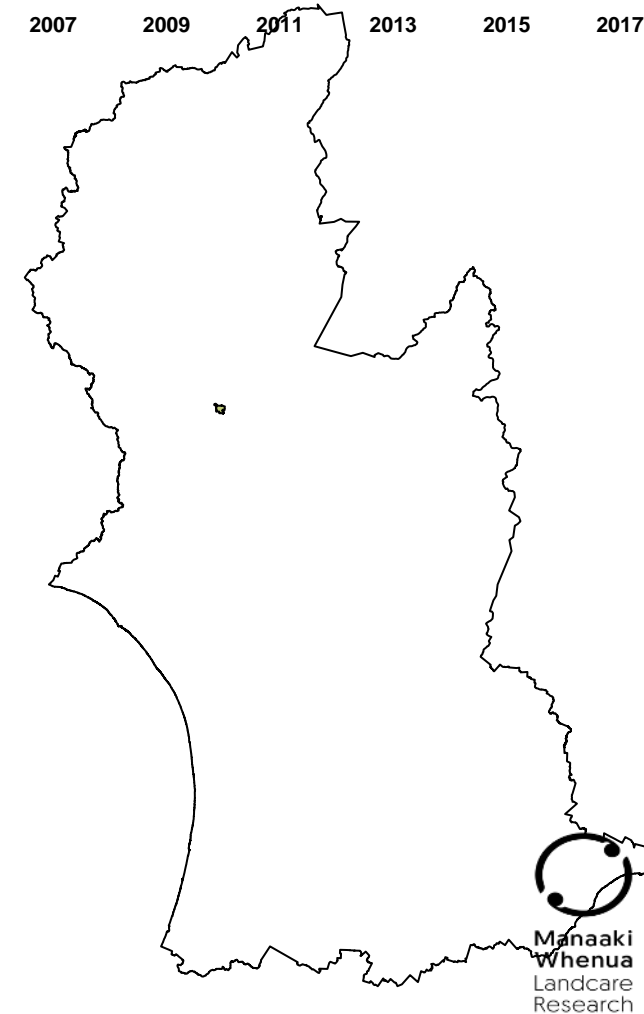
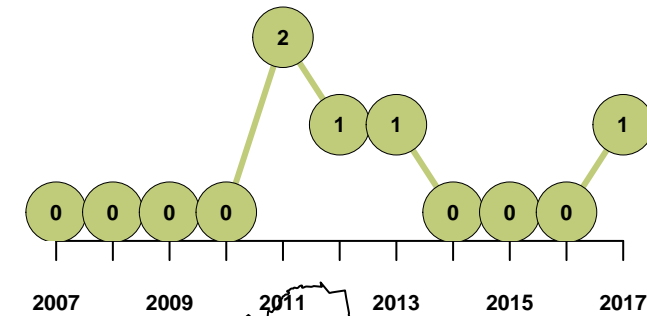


New Zealand
**GARDEN
BIRD
SURVEY**

Raetihi

	Median	80% Confidence Interval	Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	74%	54 to 89%	○	○	○	○	○	●	○	●●●●●	
TUI	21%	10 to 28%	○	○	○	○	●	○	○	●●●●●	KŌKŌ
FANTAIL	3%	0 to 8%	○	○	○	●	○	○	○	●●●●●	PĪWAIWAKA
HOUSE SPARROW	-3%	-7 to 3%	○	○	○	●	○	○	○	●●●●●	TIU
BLACKBIRD	-3%	-7 to -1%	○	○	○	●	○	○	○	●●●●●	MANU PANGO
MYNA	-4%	-88 to 34%	○	○	○	●	○	○	○	○●○●○	MAINA
GOLDFINCH	-4%	-10 to 0%	○	○	○	●	○	○	○	●●●●○	
NEW ZEALAND PIGEON	-10%	-39 to 14%	○	○	○	○	○	○	○	●○●○●	KERERŪ
CHAFFINCH	-12%	-17 to -7%	○	○	○	○	○	○	○	●●●○●	PAHIRINI
SONG THRUSH	-13%	-19 to -9%	○	○	○	○	○	○	○	●●●●○	
BELLBIRD	-24%	-34 to -13%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
DUNNOCK	-32%	-40 to -24%	○	○	○	○	○	○	○	●●●●○	
STARLING	-35%	-41 to -31%	○	○	○	○	○	○	○	●●●●●	TĀRINGI
SILVEREYE	-45%	-48 to -42%	○	○	○	○	○	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

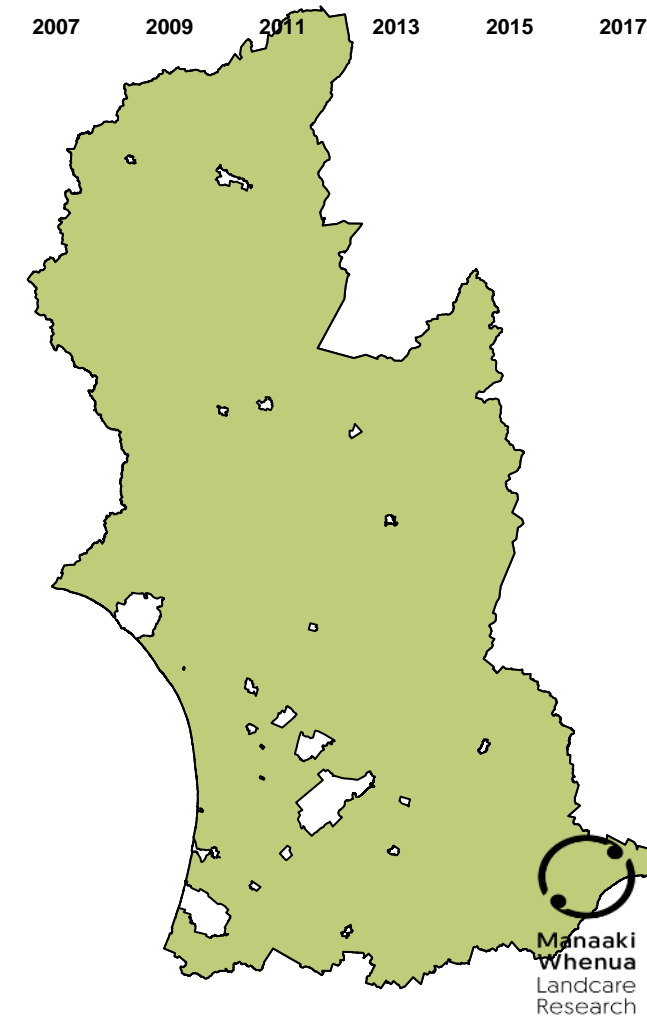
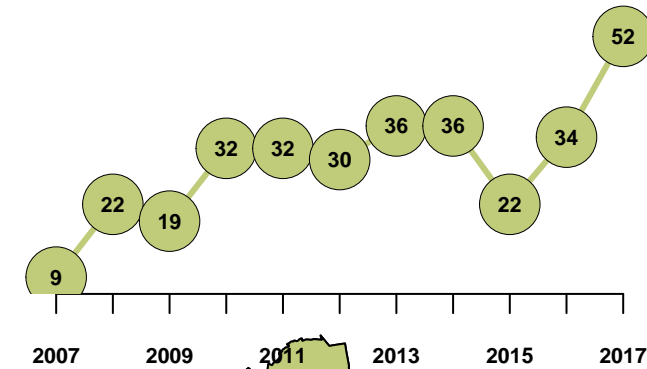
Rural (Incl.some Off Shore Islands)



New Zealand
**GARDEN
BIRD
SURVEY**

	Median	80% Confidence Interval	Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	86%	66 to 100%	○	○	○	○	○	●	○	●●●●●	
FANTAIL	2%	0 to 4%	○	○	○	●	○	○	○	●●●●●	PĪWAIWAKA
GOLDFINCH	0%	-5 to 6%	○	○	○	●	○	○	○	●●●●●	
NEW ZEALAND PIGEON	-1%	-17 to 11%	○	○	○	●	○	○	○	●●○○○	KERERŪ
HOUSE SPARROW	-6%	-10 to 1%	○	○	○	●	○	○	○	●●●●○	TIU
TUI	-7%	-12 to -3%	○	○	○	●	○	○	○	●●○○○	KŌKŌ
BLACKBIRD	-7%	-11 to -4%	○	○	○	●	○	○	○	●●●●○	MANU PANGO
CHAFFINCH	-11%	-15 to -7%	○	○	●	○	○	○	○	●●○○○	PAHIRINI
SONG THRUSH	-17%	-21 to -12%	○	○	●	○	○	○	○	●●●●●	
BELLBIRD	-17%	-24 to -10%	○	○	●	○	○	○	○	●●●●●	KORIMAKO
STARLING	-26%	-31 to -22%	○	●	○	○	○	○	○	●●○○○	TĀRINGI
DUNNOCK	-30%	-39 to -22%	○	●	○	○	○	○	○	●●●●○	
MYNA	-34%	-121 to 5%	○	●	○	○	○	○	○	●○○○○	MAINA
SILVEREYE	-40%	-44 to -37%	○	●	○	○	○	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

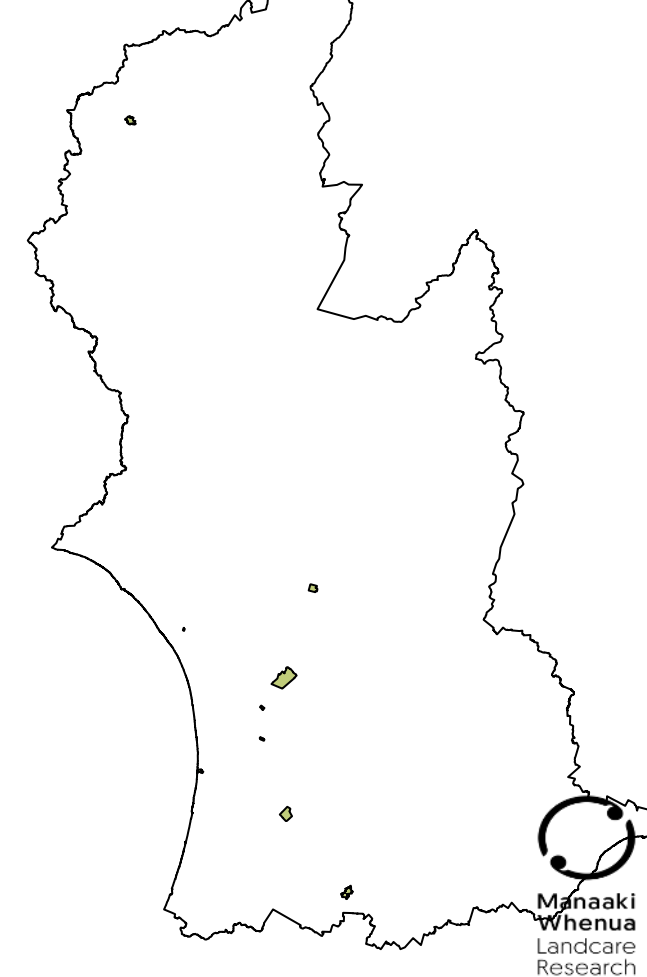
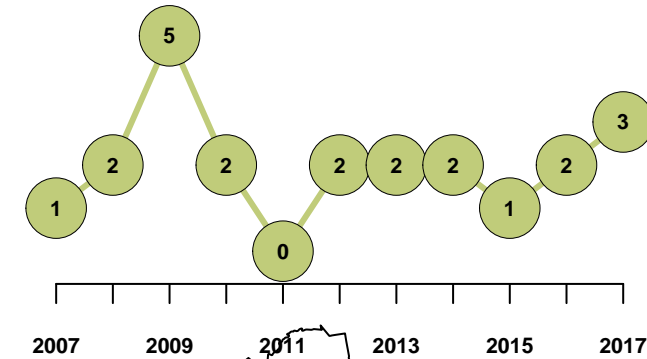


New Zealand
**GARDEN
BIRD
SURVEY**

Rural Centre

	Median	80% Confidence Interval	Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	48%	28 to 62%	○	○	○	○	●	○	○	●●●●●	
NEW ZEALAND PIGEON	17%	-13 to 40%	○	○	○	○	●	○	○	●●○○○	KERERŪ
TUI	7%	0 to 12%	○	○	○	○	●	○	○	●●●○○	KŌKŌ
GOLDFINCH	5%	0 to 10%	○	○	○	○	●	○	○	●●●●○	
FANTAIL	2%	0 to 4%	○	○	○	○	●	○	○	●●●●●	PĪWAIWAKA
BLACKBIRD	-5%	-8 to -3%	○	○	○	○	●	○	○	●●●●●	MANU PANGO
MYNA	-9%	-93 to 29%	○	○	○	○	●	○	○	○○○○○	MAINA
CHAFFINCH	-11%	-15 to -8%	○	○	○	○	●	○	○	●●●○○	PAHIRINI
HOUSE SPARROW	-12%	-16 to -5%	○	○	○	○	●	○	○	●●●○○	TIU
SONG THRUSH	-15%	-19 to -11%	○	○	○	○	●	○	○	●●●●●	
BELLBIRD	-20%	-30 to -10%	○	○	○	○	●	○	○	●●●●●	KORIMAKO
DUNNOCK	-26%	-34 to -19%	○	○	○	○	●	○	○	●●○○○	
STARLING	-33%	-39 to -29%	○	○	○	○	●	○	○	●●●●●	TĀRINGI
SILVEREYE	-42%	-45 to -39%	○	○	○	○	●	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

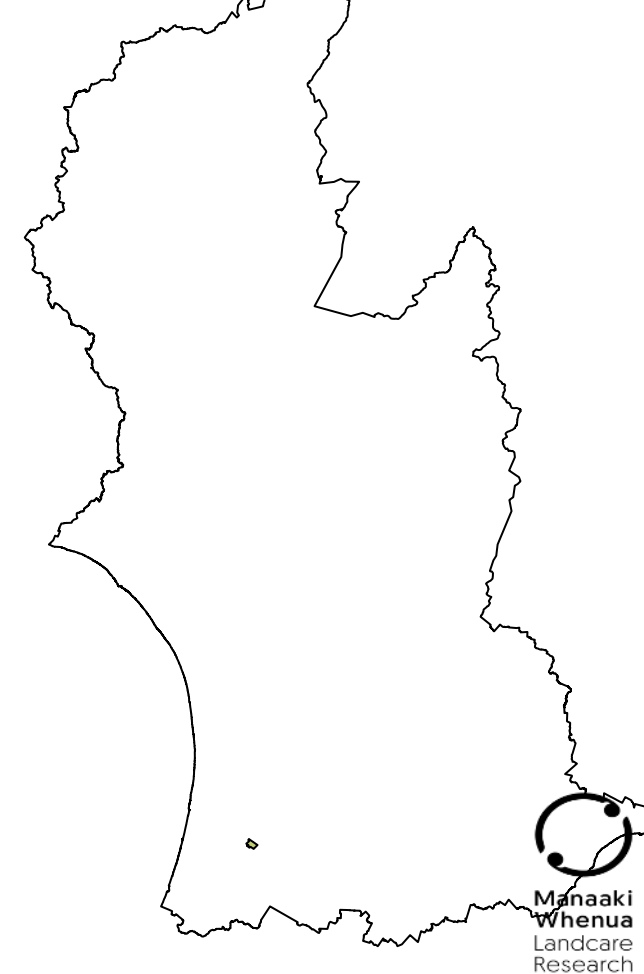
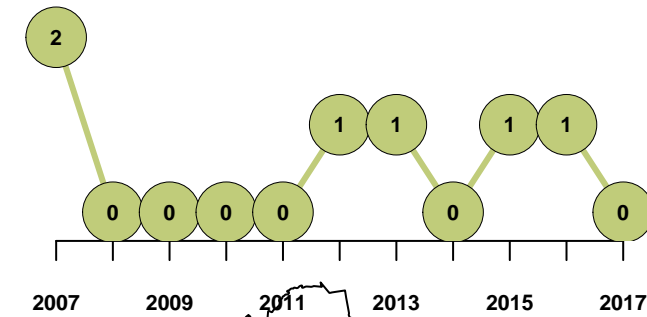
Shannon

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	67%	48	to 80%									
NEW ZEALAND PIGEON	12%	-15	to 36%									KERERŪ
TUI	10%	1	to 17%									KŌKŌ
FANTAIL	7%	1	to 12%									PĪWAIWAKA
HOUSE SPARROW	-4%	-8	to 3%									TIU
GOLDFINCH	-4%	-10	to 0%									
MYNA	-5%	-89	to 34%									MAINA
BLACKBIRD	-5%	-8	to -3%									MANU PANGO
CHAFFINCH	-10%	-14	to -6%									PAHIRINI
SONG THRUSH	-12%	-18	to -8%									
BELLBIRD	-23%	-35	to -13%									KORIMAKO
STARLING	-28%	-34	to -24%									TĀRINGI
DUNNOCK	-32%	-39	to -24%									
SILVEREYE	-40%	-44	to -38%									TAUHOHU



New Zealand
**GARDEN
BIRD
SURVEY**

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

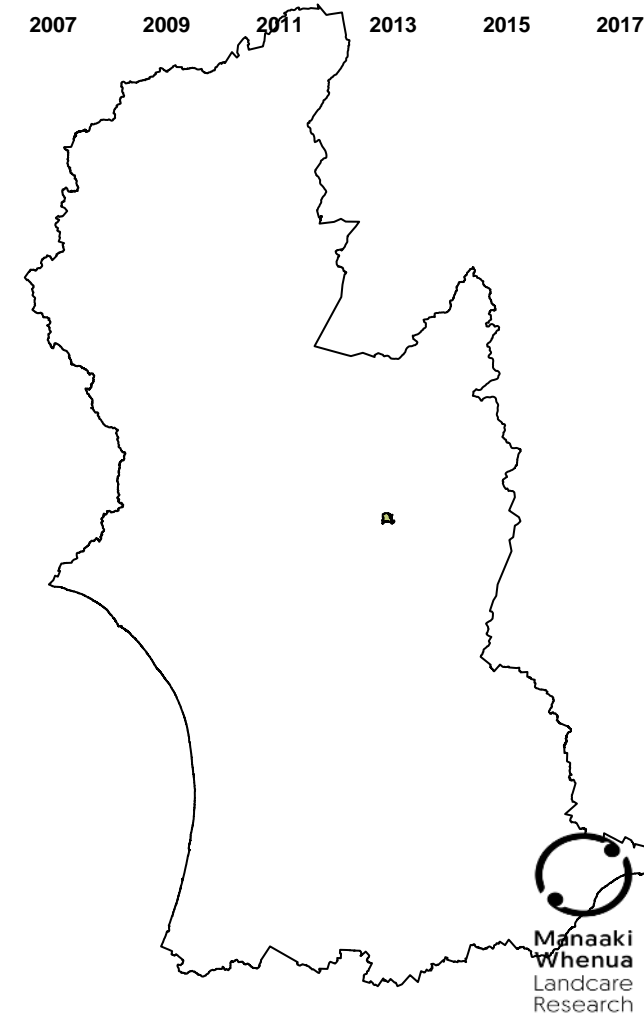
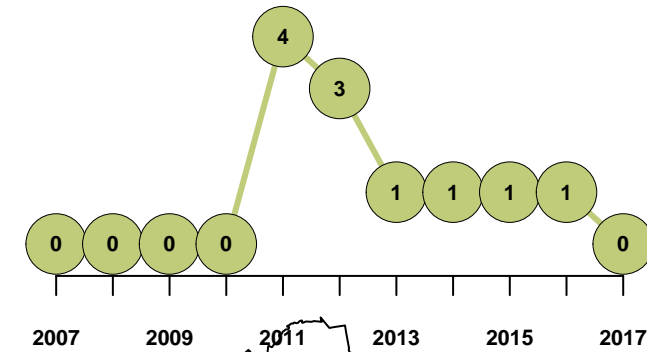


New Zealand
**GARDEN
BIRD
SURVEY**

Taihape

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	62%	43	to 75%	○	○	○	○	○	●	○	●●●●○	
FANTAIL	6%	0	to 11%	○	○	○	●	○	○	○	●●●●○	PĪWAIWAKA
GOLDFINCH	3%	-2	to 9%	○	○	○	●	○	○	○	●●●●○	
TUI	1%	-8	to 8%	○	○	○	●	○	○	○	●●●●○	KŌKŌ
MYNA	-7%	-91	to 32%	○	○	○	●	○	○	○	○●○●○	MAINA
CHAFFINCH	-7%	-12	to -3%	○	○	○	●	○	○	○	●●●●○	PAHIRINI
BLACKBIRD	-7%	-10	to -4%	○	○	○	●	○	○	○	●●●●○	MANU PANGO
SONG THRUSH	-10%	-16	to -6%	○	○	○	●	○	○	○	●○●○●	
NEW ZEALAND PIGEON	-10%	-24	to 0%	○	○	○	●	○	○	○	●○●○●	KERERŪ
HOUSE SPARROW	-11%	-16	to -4%	○	○	○	●	○	○	○	●●○●○	TIU
DUNNOCK	-18%	-27	to -10%	○	○	○	●	○	○	○	●●●●○	
BELLBIRD	-18%	-26	to -11%	○	○	○	●	○	○	○	●●●●○	KORIMAKO
STARLING	-26%	-31	to -22%	○	○	○	●	○	○	○	●○●○●	TĀRINGI
SILVEREYE	-38%	-41	to -35%	○	○	○	●	○	○	○	●●●●○	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

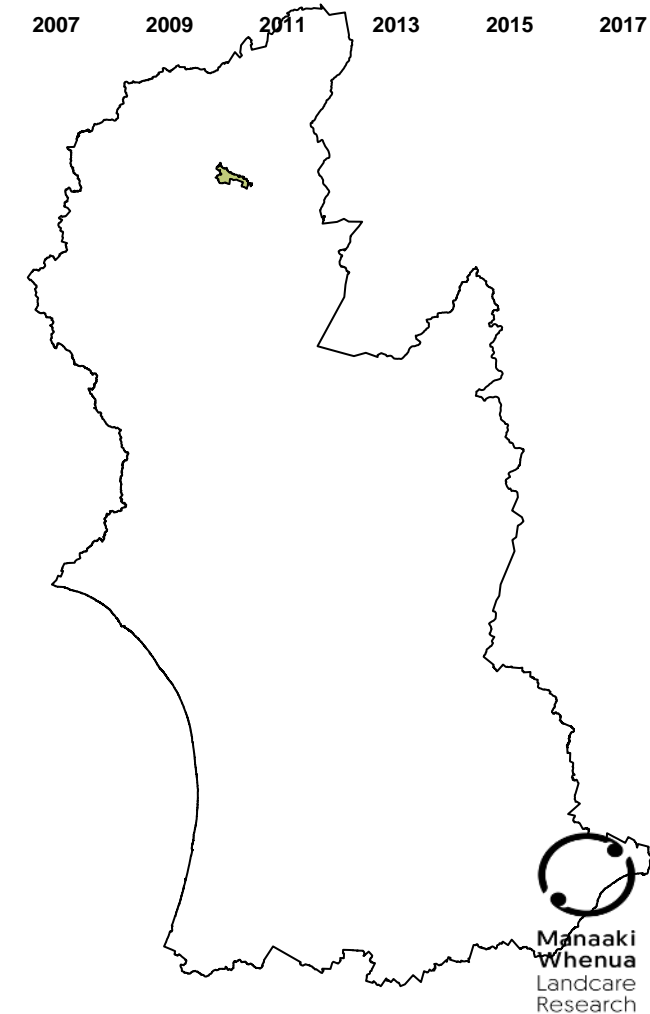
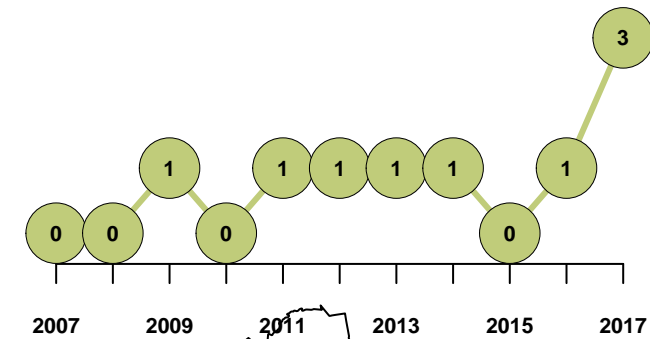


New Zealand
**GARDEN
BIRD
SURVEY**

Taumarunui

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	73%	53	to 87%	○	○	○	○	○	●	○	●●●●●	
MYNA	25%	-58	to 65%	○	○	○	○	○	○	○	●●○○○	MAINA
TUI	6%	0	to 11%	○	○	○	○	○	○	○	●●●○○	KŌKŌ
FANTAIL	5%	0	to 9%	○	○	○	○	○	○	○	●●●●●	PĪWAIWAKA
GOLDFINCH	-3%	-8	to 1%	○	○	○	○	○	○	○	●●●●●	
BLACKBIRD	-7%	-10	to -5%	○	○	○	○	○	○	○	●●●●○	MANU PANGO
HOUSE SPARROW	-8%	-12	to -1%	○	○	○	○	○	○	○	●●○○○	TIU
NEW ZEALAND PIGEON	-12%	-43	to 5%	○	○	○	○	○	○	○	●○○○○	KERERŪ
CHAFFINCH	-12%	-16	to -7%	○	○	○	○	○	○	○	●●●○○	PAHIRINI
SONG THRUSH	-13%	-19	to -9%	○	○	○	○	○	○	○	●●●●○	
BELLBIRD	-19%	-27	to -11%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
DUNNOCK	-26%	-34	to -18%	○	○	○	○	○	○	○	●●○○○	
STARLING	-30%	-36	to -26%	○	○	○	○	○	○	○	●●●●●	TĀRINGI
SILVEREYE	-44%	-47	to -41%	○	○	○	○	○	○	○	●●●●●	TAUHOU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

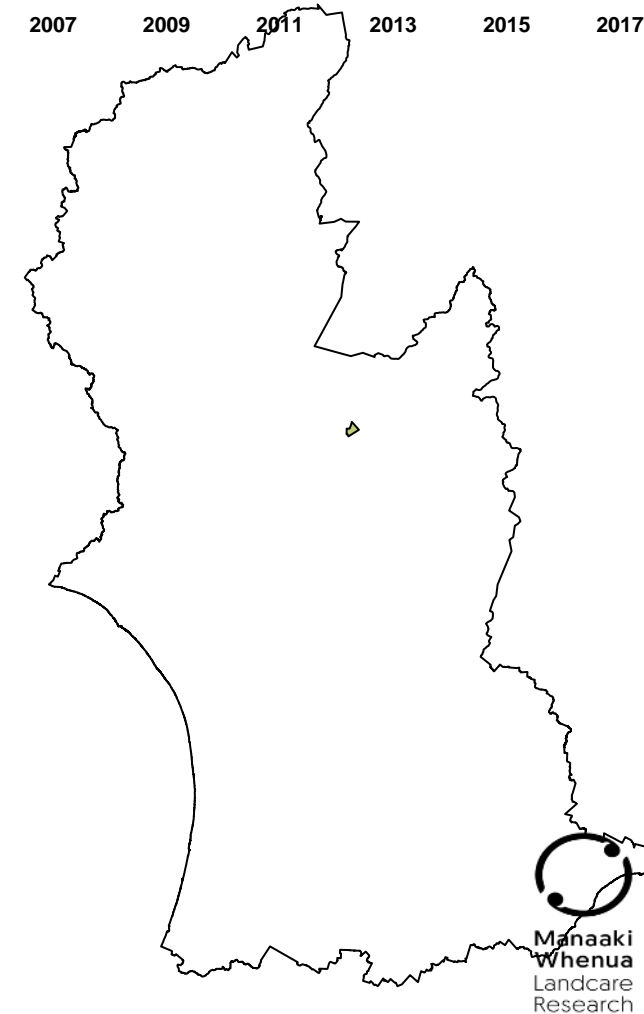
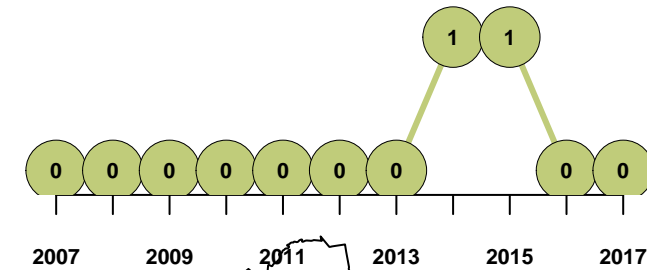


New Zealand
**GARDEN
BIRD
SURVEY**

Waiouru

	Median	80% Confidence Interval	Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	84%	64 to 98%	○	○	○	○	○	●	○	●●●●●	
TUI	11%	3 to 17%	○	○	○	○	●	○	○	●○○○○	KŌKŌ
FANTAIL	6%	1 to 11%	○	○	○	○	○	○	○	●●●●○	PĪWAIWAKA
NEW ZEALAND PIGEON	5%	-18 to 27%	○	○	○	○	○	○	○	○○○○○	KERERŪ
GOLDFINCH	-3%	-9 to 1%	○	○	○	○	○	○	○	●●●●●	
MYNA	-4%	-87 to 35%	○	○	○	○	○	○	○	○○○○○	MAINA
HOUSE SPARROW	-4%	-8 to 2%	○	○	○	○	○	○	○	●●●●●	TIU
BLACKBIRD	-6%	-9 to -3%	○	○	○	○	○	○	○	●●●●●	MANU PANGO
CHAFFINCH	-7%	-11 to -3%	○	○	○	○	○	○	○	●●●○○	PAHIRINI
SONG THRUSH	-22%	-28 to -18%	○	○	○	○	○	○	○	●●●●●	
BELLBIRD	-23%	-33 to -13%	○	○	○	○	○	○	○	●●●●●	KORIMAKO
DUNNOCK	-24%	-32 to -17%	○	○	○	○	○	○	○	●●●●●	
STARLING	-34%	-39 to -29%	○	○	○	○	○	○	○	●●●●●	TĀRINGI
SILVEREYE	-43%	-47 to -41%	○	○	○	○	○	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

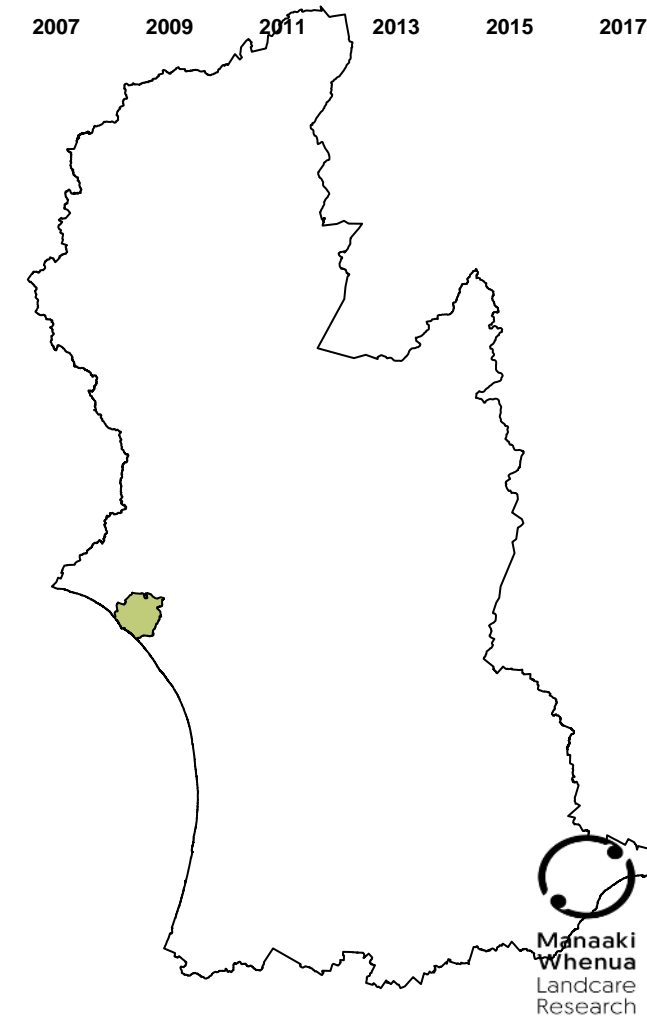
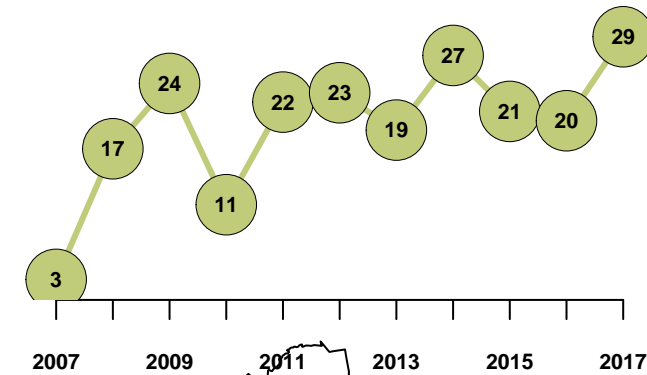
Wanganui



New Zealand
**GARDEN
BIRD
SURVEY**

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	80%	61	to 93%	○	○	○	○	○	●	○	●●●●●	
MYNA	19%	-63	to 62%	○	○	○	○	○	○	○	●○○○○	MAINA
FANTAIL	5%	0	to 10%	○	○	○	○	○	○	○	●●●●○	PŪWAIWAKA
TUI	0%	-5	to 5%	○	○	○	○	○	○	○	●●●●●	KŌKŌ
GOLDFINCH	0%	-7	to 5%	○	○	○	○	○	○	○	●●●●●	
HOUSE SPARROW	-5%	-10	to 2%	○	○	○	○	○	○	○	●●●●○	TIU
CHAFFINCH	-5%	-10	to -1%	○	○	○	○	○	○	○	●●●●○	PAHIRINI
BLACKBIRD	-8%	-11	to -5%	○	○	○	○	○	○	○	●●●○○	MANU PANGO
SONG THRUSH	-12%	-18	to -7%	○	○	○	○	○	○	○	●●●○○	
NEW ZEALAND PIGEON	-15%	-30	to -2%	○	○	○	○	○	○	○	●●●○○	KERERŪ
BELLBIRD	-17%	-26	to -9%	○	○	○	○	○	○	○	●●●●○	KORIMAKO
STARLING	-28%	-34	to -24%	○	○	○	○	○	○	○	●●●●○	TĀRINGI
DUNNOCK	-31%	-40	to -23%	○	○	○	○	○	○	○	●●●●○	
SILVEREYE	-42%	-46	to -40%	○	○	○	○	○	○	○	●●●●○	TAUHOHU

NUMBER OF GARDEN SURVEYS



How have bird counts changed?

MANAWATU-WANGANUI REGION | 2007-2017

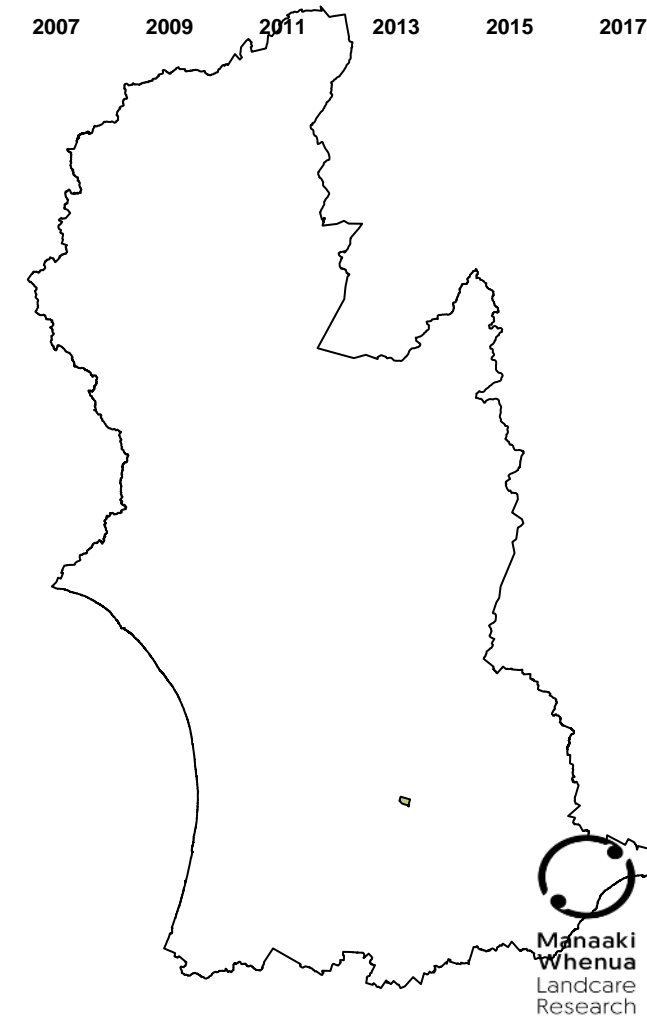
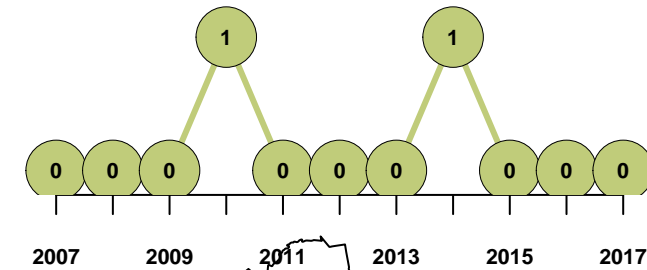


New Zealand
**GARDEN
BIRD
SURVEY**

Woodville

	Median	80% Confidence Interval		Rapid decline	Moderate decline	Shallow decline	No or little change	Shallow increase	Moderate increase	Rapid increase	Quality rating	
GREENFINCH	71%	51	to 85%	○	○	○	○	○	●	○	●●●●●	
TUI	6%	-1	to 12%	○	○	○	●	○	○	○	●●●○○	KŌKŌ
NEW ZEALAND PIGEON	6%	-17	to 29%	○	○	○	●	○	○	○	○○○○○	KERERŪ
FANTAIL	5%	0	to 9%	○	○	○	●	○	○	○	●●●●●	PĪWAIWAKA
GOLDFINCH	-2%	-8	to 2%	○	○	○	●	○	○	○	●●●●●	
MYNA	-3%	-87	to 36%	○	○	○	●	○	○	○	○○○○○	MAINA
HOUSE SPARROW	-4%	-8	to 2%	○	○	○	●	○	○	○	●●●●●	TIU
BLACKBIRD	-5%	-8	to -3%	○	○	○	●	○	○	○	●●●●●	MANU PANGO
SONG THRUSH	-11%	-16	to -7%	○	○	●	○	○	○	○	●●○○○	
CHAFFINCH	-11%	-15	to -6%	○	○	●	○	○	○	○	●●○○○	PAHIRINI
BELLBIRD	-13%	-21	to -5%	○	○	●	○	○	○	○	●●●○○	KORIMAKO
STARLING	-31%	-36	to -27%	○	●	○	○	○	○	○	●●●●●	TĀRINGI
DUNNOCK	-31%	-39	to -23%	○	●	○	○	○	○	○	●●●●○	
SILVEREYE	-43%	-47	to -41%	○	●	○	○	○	○	○	●●●●●	TAUHOHU

NUMBER OF GARDEN SURVEYS





New Zealand
**GARDEN
BIRD
SURVEY**

2018
30 June to 8 July

Visit our webpage to learn more:
gardenbirdssurvey.landcareresearch.co.nz

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