

Supporting Information

Table S1. Geographical details of the study sites.

Site name	Island	Geographical location	Altitude (m asl)
Wrights Hill Reserve	N	41° 17' 44'' S / 174° 43' 39'' E	230
Zealandia	N	41° 17' 40'' S / 174° 44' 46'' E	153
George Denson Park	N	41° 18' 12'' S / 174° 45' 09'' E	238
Charles Plimmer Park	N	41° 17' 33'' S / 174° 47' 51'' E	82
Northern Town Belt	N	41° 16' 42'' S / 174° 46' 25'' E	155
Hinau Reserve	S	42° 20' 54'' S / 173° 33' 60'' E	237
Mount Fyfee Reserve	S	42° 19' 45'' S / 173° 38' 04'' E	405
Puhi-Puhi River	S	42° 16' 33'' S / 173° 44' 17'' E	177
Blue Duck Reserve	S	42° 14' 10'' S / 173° 47' 08'' E	390

Table S2. Studied plant and bird species.

Plants			
Common name	Scientific name	Plant family	Fruit type
Five-finger	<i>Pseudopanax arboreus</i>	Araliaceae	fleshy fruit
Pate	<i>Schefflera digitata</i>	Araliaceae	fleshy fruit
Darwin's Barberry *	<i>Berberis darwinii</i>	Berberidaceae	fleshy fruit
Tutu	<i>Coriaria arborea</i>	Coriariaceae	fleshy fruit
Karaka	<i>Corynocarpus laevigatus</i>	Corynocarpaceae	fleshy fruit
Wineberry	<i>Aristotelia serrata</i>	Elaeocarpaceae	fleshy fruit
Hinau	<i>Elaeocarpus dentatus</i>	Elaeocarpaceae	fleshy fruit
Pokaka	<i>Elaeocarpus hookerianus</i>	Elaeocarpaceae	fleshy fruit
Putaputaweta	<i>Carpodetus serratus</i>	Escalloniaceae	fleshy fruit
Broadleaf	<i>Griselinia littoralis</i>	Griselinaceae	fleshy fruit
Hangehange	<i>Geniostoma rupestre</i>	Langoniaceae	capsule (sticky seeds)
Tawa	<i>Beilschmiedia tawa</i>	Lauraceae	fleshy fruit
Laurel tree *	<i>Laurus nobilis</i>	Lauraceae	fleshy fruit
Pigeonwood	<i>Hedycarya arborea</i>	Monimiaceae	fleshy fruit
Ngaio	<i>Myoporum laetum</i>	Myoporaceae	fleshy fruit
Mapau	<i>Myrsine australis</i>	Myrsinaceae	fleshy fruit
Tree Fuchsia	<i>Fuchsia excorticata</i>	Onagraceae	fleshy fruit
Kawakawa	<i>Macropiper excelsum</i>	Piperaceae	fleshy fruit
Karo	<i>Pittosporum crassifolium</i>	Pittosporaceae	capsule (sticky seeds)
Tarata	<i>Pittosporum eugeniooides</i>	Pittosporaceae	capsule (sticky seeds)
Kohuhu	<i>Pittosporum tenuifolium</i>	Pittosporaceae	capsule (sticky seeds)
Rimu	<i>Dacrydium cupressinum</i>	Podocarpaceae	fleshy cone
Kahikatea	<i>Dacrydium dacydiooides</i>	Podocarpaceae	fleshy cone
Totara	<i>Podocarpus totara</i>	Podocarpaceae	fleshy cone
Miro	<i>Prumnopitys ferruginea</i>	Podocarpaceae	fleshy cone
Matai	<i>Prumnopitys taxifolia</i>	Podocarpaceae	fleshy cone
Pohuehue	<i>Muehlenbeckia australis</i>	Polygonaceae	capsule (sticky seeds)
Apple tree *	<i>Malus domestica</i>	Rosaceae	fleshy fruit
Hawthorn *	<i>Crataegus monogyna</i>	Rosaceae	fleshy fruit
Blackberry *	<i>Rubus fruticosus</i>	Rosaceae	fleshy fruit
Kanoko	<i>Coprosma grandifolia</i>	Rubiaceae	fleshy fruit
Shiny Karamu	<i>Coprosma lucida</i>	Rubiaceae	fleshy fruit
Large seeded Coprosma	<i>Coprosma macrocarpa</i>	Rubiaceae	fleshy fruit
Taupata	<i>Coprosma repens</i>	Rubiaceae	fleshy fruit
Twiggy Coprosma	<i>Coprosma rhamnoides</i>	Rubiaceae	fleshy fruit
Karamu	<i>Coprosma robusta</i>	Rubiaceae	fleshy fruit
Titoki	<i>Alectryon excelsus</i>	Sapindaceae	arilated seed
Kareao	<i>Ripogonum scandens</i>	Smilacaceae	fleshy fruit
Poroporo	<i>Solanum laciniatum</i>	Solanaceae	fleshy fruit
Black Nightshade *	<i>Solanum nigrum</i>	Solanaceae	fleshy fruit
Mahoe	<i>Melicytus ramiflorus</i>	Violaceae	fleshy fruit
Horopito	<i>Pseudowintera axillaris</i>	Winteraceae	fleshy fruit

* Exotic species

Table S2 cont. Studied plant and bird species.

Birds			
Common name	Scientific name	Bird family	Body weight (g)†
Kereru	<i>Hemiphaga novaeseelandiae</i>	Columbidae	650
Saddleback	<i>Philesturnus carunculatus</i>	Callaeidae	75
Tui	<i>Prosthemadera novaeseelandiae</i>	Meliphagidae	105
Bellbird	<i>Anthornis melanura</i>	Meliphagidae	30
Kaka	<i>Nestor meridionalis</i>	Nestoridae	500
Stitchbird	<i>Notiomystis cincta</i>	Notiomystidae	35
Whitehead	<i>Mohoua albicilla</i>	Pachycephalidae	27
New Zealand robin	<i>Petroica australis</i>	Petroicidae	35
Red-crowned parakeet	<i>Cyanoramphus novaezelandiae</i>	Psittaculidae	45
Starling *	<i>Sturnus vulgaris</i>	Sturnidae	85
Blackbird *	<i>Turdus merula</i>	Turdidae	90
Songthrush *	<i>Turdus philomelos</i>	Turdidae	70
Waxeye **	<i>Zosterops lateralis</i>	Zosteropidae	13

* Exotic species, introduced by European colonists in the late 19th century (Kelly et al. 2010)

** Species that naturally colonized New Zealand from Australia in the recent past (<200 years), considered here as native (Burns 2012).

† Average male/female. (Robertson & Heather 2005)

References

- Burns, K.C. (2012) Are introduced birds unimportant mutualists? A case study of frugivory in European blackbirds (*Turdus merula*). *New Zealand Journal of Ecology*, **36**, 171-176.
- Kelly, D., Ladley, J.J., Robertson, A.W., Anderson, S.H., Wotton, D.M. & Wiser S.K. (2010) Mutualisms with the wreckage of an avifauna: the status of bird pollination and fruit dispersal in New Zealand. *New Zealand Journal of Ecology*, **34**, 66–85.
- Robertson, H. & Heather, B. (2005) *The hand guide to the birds of New Zealand, revised edition*. Penguin Books Ltd, London, UK.

Table S3. Abundance of fruits and birds at each study site. The number of fruits is calculated as the per-round average of the sum of crop sizes of all individual plants of a site (3-4 rounds per transect across the fruiting season, 1 round every 15-20 days). The number of birds is the cumulative number of observations per 10 hours (4-6 1 hour censuses per site, 1 census every 10-15 days). The number of plant and bird species is also shown. Relative abundances (%) are shown for the two more abundant species (percentage of observations of a given species divided by the total number of observations within each transect).

Site	Plants			Birds		
	No. fruits	No. sp	Species (%)	No. birds	No. sp	Species (%)
Wrights Hill Reserve	31612	15	<i>Myrsine australis</i> (51)	208	5	Blackbird (46)
			<i>Coprosma grandifolia</i> (19)			Waxeye (31)
Zealandia	34315	20	<i>Pseudopanax arboreus</i> (43)	371	12	Tui (25)
			<i>Melicytus ramiflorus</i> (14)			Blackbird (21)
George Denton Park	10272	10	<i>Melicytus ramiflorus</i> (28)	199	9	Waxeye (39)
			<i>Geniostoma rupestre</i> (17)			Blackbird (25)
Charles Plimmer Park	14232	12	<i>Myoporum laetum</i> (51)	263	5	Waxeye (36)
			<i>Melicytus ramiflorus</i> (33)			Tui (34)
Northern Town Belt	9592	11	<i>Schefflera digitata</i> (19)	86	6	Waxeye (36)
			<i>Macropiper excelsum</i> (17)			Blackbird (31)
Hinau Reserve	50655	17	<i>Pseudopanax arboreus</i> (51)	232	7	Waxeye (56)
			<i>Coprosma grandifolia</i> (16)			Bellbird (20)
Mount Fyfee Reserve	55516	16	<i>Pseudopanax arboreus</i> (73)	268	7	Waxeye (39)
			<i>Coprosma grandifolia</i> (8)			Bellbird (35)
Puhi-Puhi River	79143	20	<i>Pseudopanax arboreus</i> (69)	659	8	Bellbird (34)
			<i>Podocarpus totara</i> (7)			Waxeye (31)
Blue Duck Reserve	28619	17	<i>Beilschmiedia tawa</i> (35)	232	7	Bellbird (39)
			<i>Podocarpus totara</i> (29)			Kereru (26)

Table S4. Fruit consumption observations at each study site. Each cell of the matrix contains the number of fruits consumed per bird and plant species. Between parentheses are the number of events of frugivory (i.e. observation of an individual bird eating fruits on a given plant species).

Wrights Hill Reserve

Plants	Birds	Blackbird	Starling	Tui	Waxeye	All birds
<i>Aristotelia serrata</i>		4 (1)				4 (1)
<i>Berberis darwinii</i>		22 (6)			7 (4)	29 (10)
<i>Coprosma grandifolia</i>		78 (14)		21 (4)	9 (4)	108 (22)
<i>Coprosma robusta</i>		12 (1)		8 (1)	9 (2)	29 (4)
<i>Fuchsia excorticata</i>		3 (1)		5 (1)		8 (2)
<i>Melicytus ramiflorus</i>		7 (1)	3 (1)	22 (2)	18 (4)	50 (8)
<i>Myrsine australis</i>		16 (3)		7 (1)	5 (2)	28 (6)
<i>Solanum nigrum</i>		4 (1)			3 (2)	7 (3)
All plants		146 (28)	3 (1)	63 (9)	51 (18)	263 (56)

Table S4 cont. Fruit consumption observations at each study site.

Zealandia

Plants	Birds	Blackbird	Red-crowned parakeet	Saddleback	Stitchbird	Tui	Waxeye	Whitehead	All birds
<i>Aristotelia serrata</i>						10 (2)	7 (2)		17 (4)
<i>Coprosma grandifolia</i>	42 (5)	4 (1)	22 (4)		36 (6)	7 (3)	3 (1)	114 (20)	
<i>Coprosma repens</i>						25 (3)			25 (3)
<i>Coprosma robusta</i>	7 (1)		5 (1)		115 (8)	5 (1)	3 (1)	135 (12)	
<i>Fuchsia excorticata</i>	7 (1)				6 (1)	3 (1)		16 (3)	
<i>Geniostoma rupestrre</i>					4 (1)	4 (1)		8 (2)	
<i>Macropiper excelsum</i>	3 (2)			2 (1)	12 (3)			17 (6)	
<i>Melicytus ramiflorus</i>	68 (7)	39 (4)		60 (9)	53 (8)	35 (9)	7 (2)	262 (39)	
<i>Myoporum laetum</i>	69 (8)				31 (6)	2 (1)		102 (15)	
<i>Pseudopanax arboreus</i>	2 (1)			4 (1)	14 (3)	50 (11)	3 (1)	73 (17)	
<i>Ripogonum scandens</i>	3 (1)							3 (1)	
<i>Schefflera digitata</i>						3 (1)		3 (1)	
All plants		201 (26)	43 (5)	27 (5)	66 (11)	309 (42)	113 (29)	16 (5)	775 (123)

Table S4 cont. Fruit consumption observations at each study site.

George Denton Park

Plants	Birds	Blackbird	Starling	Tui	Waxeye	Whitehead	All birds
<i>Coriaria arborea</i>					5 (1)		5 (1)
<i>Coprosma grandifolia</i>		23 (4)	4 (1)	32 (7)	8 (4)	4 (1)	71 (17)
<i>Coprosma robusta</i>				7 (1)			7 (1)
<i>Fuchsia excorticata</i>				6 (1)			6 (1)
<i>Geniostoma rupestre</i>					7 (2)		7 (2)
<i>Melicytus ramiflorus</i>	24 (3)	22 (4)	70 (8)	89 (16)	15 (3)	220 (34)	
<i>Muehlenbeckia australis</i>				43 (6)			43 (6)
<i>Myrsine australis</i>	5 (1)	3 (1)			3 (1)		11 (3)
<i>Myoporum laetum</i>					3 (1)		3 (1)
<i>Rubus fruticosus</i>		4 (2)					4 (2)
<i>Solanum nigrum</i>		3 (1)			26 (8)		29 (9)
All plants	59 (11)	29 (6)	158 (23)	141 (33)	19 (4)	406 (77)	

Table S4 cont. Fruit consumption observations at each study site.

Charles Plimmer Park

Plants	Birds	Blackbird	New Zealand Robin	Songthrush	Starling	Tui	Waxeye	All birds
<i>Coprosma grandifolia</i>			2 (1)	3 (1)		11 (2)		16 (4)
<i>Coprosma repens</i>						13 (2)	8 (4)	21 (6)
<i>Coprosma robusta</i>		4 (1)				4 (1)	15 (4)	23 (6)
<i>Crataegus monogyna</i>		4 (1)				2 (1)		6 (2)
<i>Laurus nobilis</i>				3 (1)		2 (1)		5 (2)
<i>Macropiper excelsum</i>		9 (4)				5 (2)	6 (6)	20 (12)
<i>Melicytus ramiflorus</i>						4 (1)	44 (9)	48 (10)
<i>Muehlenbeckia australis</i>							20 (3)	20 (3)
<i>Myoporum laetum</i>		30 (5)			10 (3)	98 (16)	10 (6)	148 (30)
<i>Pseudopanax arboreus</i>							2 (1)	2 (1)
<i>Rubus fruticosus</i>		2 (1)						2 (1)
<i>Solanum nigrum</i>							12 (3)	12 (3)
All plants		49 (12)	2 (1)	3 (1)	13 (4)	139 (26)	117 (36)	323 (80)

Northern Town Belt

Plants	Birds	Blackbird	Songthrush	Tui	Waxeye	All birds
<i>Aristotelia serrata</i>		3 (1)		4 (1)		7 (2)
<i>Coprosma grandifolia</i>		6 (1)	3 (1)	37 (5)	4 (2)	50 (9)
<i>Coprosma robusta</i>		0			13 (3)	13 (3)
<i>Geniostoma rupestre</i>					6 (2)	6 (2)
<i>Macropiper excelsum</i>		1 (1)		2 (1)		3 (2)
<i>Melicytus ramiflorus</i>				4 (1)	36 (9)	40 (10)
<i>Myoporum laetum</i>				33 (5)		33 (5)
<i>Pseudopanax arboreus</i>		2 (1)			2 (1)	4 (2)
All plants		12 (4)	3 (1)	80 (13)	61 (17)	156 (35)

Table S4 cont. Fruit consumption observations at each study site.

Hinau Reserve

Plants	Birds	Bellbird	Blackbird	Kereru	Songthrush	Waxeye	All birds
<i>Aristotelia serrata</i>				7 (1)	0	4 (2)	11 (3)
<i>Coprosma grandifolia</i>	22 (7)	23 (7)		5 (1)		13 (8)	63 (23)
<i>Coprosma robusta</i>						40 (8)	40 (8)
<i>Macropiper excelsum</i>					1 (1)		1 (1)
<i>Melicytus ramiflorus</i>	8 (2)					11 (2)	19 (4)
<i>Pittosporum eugenioides</i>						1 (1)	1 (1)
<i>Pseudopanax arboreus</i>			1 (1)			122 (29)	123 (30)
All plants	30 (9)	24 (8)		12 (2)	1 (1)	191 (50)	258 (70)

Mount Fyfee Reserve

Plants	Birds	Bellbird	Blackbird	Kereru	Songthrush	Waxeye	All Birds
<i>Carpodetus serratus</i>				12 (1)			12 (1)
<i>Coriaria arborea</i>						7 (1)	7 (1)
<i>Coprosma grandifolia</i>	3 (1)	7 (2)			14 (2)	7 (3)	31 (8)
<i>Coprosma robusta</i>	9 (1)						9 (1)
<i>Dacrydium dacrydioides</i>	12 (1)						12 (1)
<i>Fuchsia excorticata</i>				17 (3)		1 (1)	18 (4)
<i>Melicytus ramiflorus</i>						5 (1)	5 (1)
<i>Podocarpus totara</i>	16 (2)						16 (2)
<i>Prumnopitys taxifolia</i>	4 (2)		72 (10)				76(12)
<i>Pseudopanax arboreus</i>	4 (1)	10 (3)	42 (2)	19 (3)	109 (26)	184 (35)	
All plants	48 (8)	17 (5)	143 (16)	33 (5)	129 (32)	370 (66)	

Table S4 cont. Fruit consumption observations at each study site.

Puhi-Puhi River

Plants	Birds	Bellbird	Blackbird	Kereru	Songthrush	Starling	Tui	Waxeye	All plants
<i>Coprosma grandifolia</i>			6 (1)					11 (4)	17 (5)
<i>Coprosma robusta</i>	24 (4)	7 (2)		6 (1)				31 (7)	68 (14)
<i>Crataegus monogyna</i>								1 (1)	1 (1)
<i>Fuchsia excorticata</i>				12 (1)					12 (1)
<i>Hedycarya arborea</i>				15 (1)					15 (1)
<i>Malus domestica</i>	4 (4)								4 (4)
<i>Macropiper excelsum</i>				3 (1)				1 (1)	4 (2)
<i>Melicytus ramiflorus</i>		6 (1)	7 (1)		10 (1)		10 (2)		33 (5)
<i>Myrsine australis</i>								3 (1)	3 (1)
<i>Myoporum laetum</i>		7 (1)		3 (1)					10 (2)
<i>Pittosporum eugenoides</i>								15 (7)	15 (7)
<i>Pittosporum tenuifolium</i>								5 (1)	5 (1)
<i>Podocarpus totara</i>	498 (88)	22 (7)	48 (5)	8 (3)	16 (3)	16 (2)	79 (27)		687 (135)
<i>Prumnopitys ferruginea</i>				5 (1)					5 (1)
<i>Prumnopitys taxifolia</i>	11 (4)	21 (7)	124 (11)	9 (3)	12 (3)	5 (2)			182 (30)
<i>Pseudopanax arboreus</i>	5 (2)	69 (13)	83 (3)	46 (8)	139 (21)	7 (1)	231 (50)		580 (98)
All birds	542 (102)	138 (32)	297 (24)	72 (16)	177 (28)	28 (5)	387 (101)		1641 (308)

Table S4 cont. Fruit consumption observations at each study site.

Blue Duck Reserve

Plants	Birds	Bellbird	Blackbird	Kereru	Songthrush	Waxeye	All birds
<i>Beilschmiedia tawa</i>				153 (26)			153 (26)
<i>Coprosma grandifolia</i>		5 (1)	2 (1)				7 (2)
<i>Coprosma robusta</i>					11 (1)	11 (1)	
<i>Dacrydium dacrydioides</i>		7 (1)		15 (3)			22 (4)
<i>Elaeocarpus dentatus</i>		1 (1)					1 (1)
<i>Melicytus ramiflorus</i>			3 (1)	19 (1)			22 (2)
<i>Podocarpus totara</i>	78 (13)	8 (1)	8 (1)	3 (1)	9 (3)	106 (19)	
<i>Prumnopitys ferruginea</i>				42 (5)			42 (5)
<i>Prumnopitys taxifolia</i>	2 (1)	11 (3)	23 (3)	7 (2)			43 (9)
<i>Pseudopanax arboreus</i>					5 (1)	5 (1)	10 (2)
<i>Ripogonum scandens</i>		1 (1)					1 (1)
All plants	94 (18)	24 (6)	260 (39)	15 (4)	25 (5)	418 (72)	

Table S5. Pearson's correlation coefficients between network metrics, abundance of exotic birds and frugivory by exotics (coefficients $P < 0.05$ in bold, $N = 9$).

	Network size	Interactions per species	Shannon diversity	Specialisation H ₂ '	Connectance	Network asymmetry	Links per species	Nestedness WNODF	Int. strength asymmetry	Extinction slope Birds	Extinction slope Plants	Robustness Birds	Robustness Plants	Niche overlap Birds	Niche overlap Plants	Generality Birds	Redundancy Plants	Rel. Abundance Exotics	Rel Frugivory Exotics
Number of interactions	0.808	0.987	0.462	-0.213	-0.183	-0.272	0.658	0.275	0.159	-0.372	0.049	0.721	-0.023	0.412	-0.186	-0.082	0.709	-0.086	0.084
Network size		0.731	0.663	-0.190	-0.477	-0.406	0.623	0.114	-0.076	-0.366	-0.057	0.559	-0.174	0.306	-0.360	0.098	0.714	-0.264	-0.046
Interactions per species			0.435	-0.242	-0.103	-0.212	0.661	0.321	0.219	-0.316	0.108	0.744	0.029	0.433	-0.124	-0.078	0.709	-0.094	0.124
Shannon diversity				-0.727	0.171	-0.351	0.884	0.666	-0.125	0.137	0.574	0.606	0.448	0.525	0.290	0.742	0.832	0.177	0.509
Specialisation H ₂ '					-0.573	0.110	-0.698	-0.929	-0.022	-0.072	-0.743	-0.413	-0.672	-0.639	-0.706	-0.757	-0.695	-0.596	-0.883
Connectance						0.015	0.336	0.718	0.122	0.590	0.768	0.218	0.836	0.221	0.868	0.558	-0.001	0.684	0.779
Network asymmetry							-0.178	0.045	0.826	0.135	0.232	-0.655	0.257	-0.540	0.339	0.045	-0.226	-0.109	-0.102
Links per species								0.784	0.225	0.214	0.710	0.682	0.628	0.408	0.441	0.686	0.786	0.200	0.569
Nestedness WNODF									0.265	0.236	0.876	0.428	0.850	0.495	0.836	0.780	0.617	0.607	0.870
Int. strength asymmetry										0.210	0.418	-0.270	0.444	-0.490	0.415	0.154	-0.030	-0.139	0.061
Extinction slope Birds											0.634	-0.035	0.647	-0.380	0.523	0.556	-0.291	0.012	0.292
Extinction slope Plants												0.207	0.973	0.115	0.907	0.872	0.355	0.458	0.803
Robustness Birds												0.133	0.719	-0.024	0.154	0.667	0.044	0.295	
Robustness Plants													0.031	0.950	0.829	0.207	0.542	0.781	
Niche overlap Birds														0.067	0.142	0.735	0.381	0.426	
Niche overlap Plants															0.757	0.119	0.660	0.826	
Generality Birds																0.390	0.368	0.691	
Redundancy Plants																0.137	0.398		
Rel. Abundance Exotics																	0.752		

Table S6. Results of linear [$y=a+b*x$] and nonlinear [exponential decay: $y=a*\exp(-b*x)$; exponential rise: $y=a*(1-\exp(-b*x))$; power: $y=a*x^b$; quadratic: $y=a+b*x+c*x^2$] fits between network metrics (y) and the proportion of interactions accounted for by exotic birds (proportion of fruits consumed by exotics from all fruits consumed, x). Values of AICc are used to choose the best fit model (in bold). Significant ($P < 0.05$) fits are highlighted in bold.

	Model	Estimates (a/b/c)	Adj. R ²	F	P	AICc
Specialisation (H2')	Linear	0.66±0.05/-0.97±0.19	0.749	24.98	0.0016	-41.27
	Exp. decay	0.83±0.07/3.38±0.55	0.888	64.47	<0.0001	-48.50
Diversity of interactions	Linear	2.15±0.20/1.23±0.49	0.148	2.39	0.1656	-15.85
	Exp. rise	2.73±0.13/14.85±2.71	0.637	15.04	0.0061	-23.56
Number of links/species	Linear	1.22±0.15/1.14±0.62	0.227	3.35	0.1098	-20.34
	Exp. rise	1.73±0.15/12.37±3.54	0.503	7.07	0.0325	-23.09
Nestedness (W NODF)	Linear	19.53±4.68/86.56±18.53	0.723	21.82	0.0023	40.73
	Exp. rise	70.53±12.02/4.22±1.29	0.768	27.49	0.0012	39.11
Connectance	Linear	0.32±0.03/0.46±0.14	0.551	10.83	0.0133	-49.02
	Quadratic	0.44±0.06/-0.64±0.46/ 1.71±0.70	0.737	12.22	0.0077	-53.21
Generality (birds)	Linear	2.70±0.36/3.62±1.43	0.403	6.40	0.0392	-5.35
	Exp. rise	4.19±0.44/11.24±3.66	0.443	5.56	0.0500	-4.80
Redundancy (plants)	Linear	2.02±0.43/1.95±1.69	0.039	1.32	0.2879	-2.29
	Exp. rise	3.09±0.39/10.02±3.53	0.537	10.26	0.0150	-8.89
Niche overlap (birds)	Linear	0.36±0.10/0.53±0.42	0.065	1.56	0.2519	-
Niche overlap (plants)	Linear	0.27±0.04/0.76±0.19	0.637	15.06	0.0060	-
Extinction slope (birds)	Linear	2.71±1.04/3.35±4.14	0.001	0.65	0.6549	-
Extinction slope (plants)	Linear	1.52±0.23/3.31±0.92	0.595	12.73	0.0091	-
Robustness (birds)	Linear	0.77±0.03/0.11±0.13	0.001	0.66	0.4405	-
Robustness (plants)	Linear	-1.44±0.49/2.42±0.73	0.555	10.98	0.0129	-37.82
	Power	0.78±0.04/0.08±0.03	0.416	6.69	0.0361	-55.77

Table S7. Cook's distance (D) of each sampling point from linear fits between network metrics and the proportion of interactions accounted for by exotic birds (Table S7). For each fit, the number of points with D > 1 (between parentheses is the maximum D value) is shown. The results of a new linear fit removing those points with Cook's D > 1 are also detailed (fits with $P < 0.05$ in bold).

	Points D > 1	Adj. R ²	F	P
Specialisation (H ₂ ')	1 (11.42)	0.869	47.71	0.001
Diversity of interactions	1 (12.39)	0.775	25.24	0.002
Number of links per species	1 (8.75)	0.592	11.17	0.015
Nestedness (WNODF)	1 (5.48)	0.667	15.02	0.008
Connectance	1 (7.15)	0.210	1.93	0.234
Generality (birds)	1 (2.64)	0.321	4.35	0.083
Redundancy (plants)	1 (14.04)	0.843	39.69	0.001
Niche overlap (birds)	1 (4.04)	0.252	3.36	0.116
Niche overlap (plants)	1 (1.51)	0.008	0.94	0.369
Extinction slope (birds)	1 (3.28)	0.072	0.51	0.498
Extinction slope (plants)	0 (0.38)	-	-	-
Robustness (birds)	1 (2.49)	0.084	1.65	0.243
Robustness (plants)	0 (0.22)	-	-	-