

Chapter 4

Appendix 3. Confidence sets of models resulting from the information-theoretic approach and multi-model inference.

Confidence sets were defined as the set of models for which the relative likelihood value was greater than 0.125, following Burnham and Anderson (2002). For each confidence set, the selected land-cover buffer radius is shown and inclusion of detection probability (p) as an offset is indicated. Alternative model formulations to account for inter-correlated pairs of habitat and land-cover variables (active viticulture habitat with viticulture land-cover, forest habitat with forest land-cover) are also noted: (a) active viticulture and forest habitats, (b) forest and viticulture land-cover variables, (c) active viticulture habitat and forest land-cover, and (d) forest habitat and viticulture land-cover. For each model in the confidence set are shown the number of parameters (K), the variables included (shaded), Akaike's Information Criterion (AIC) adjusted for small sample size (AICc), and the difference between the model AICc and that of the best fitting model (Δ AICc). Model-averaged effect size (β), unconditional variance, 95% confidence interval (CI), and relative importance were calculated following Burnham and Anderson (2002).

REFERENCES

Burnham, K.P. & Anderson, D.R. 2002. *Model Selection and Multimodel Inference: A Practical Information-Theoretic Approach*. New York: Springer.

Table S3.1. Common Kestrel summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	8																												284.33	0.00	1.000	0.059	0.059	
2	9																												284.39	0.06	0.971	0.057	0.116	
3	7																												284.88	0.54	0.762	0.045	0.160	
4	7																												284.95	0.61	0.735	0.043	0.204	
5	6																												285.10	0.77	0.682	0.040	0.244	
6	8																												285.26	0.93	0.629	0.037	0.280	
7	8																												285.27	0.94	0.625	0.037	0.317	
8	8																												285.45	1.12	0.572	0.034	0.351	
9	7																												285.59	1.26	0.533	0.031	0.382	
10	8																												285.84	1.50	0.471	0.028	0.410	
11	7																												285.98	1.65	0.438	0.026	0.435	
12	5																												286.24	1.91	0.386	0.023	0.458	
13	6																												286.43	2.10	0.350	0.021	0.479	

14	7									286.48	2.15	0.342	0.020	0.499
15	7									286.54	2.20	0.332	0.019	0.518
16	7									286.55	2.22	0.330	0.019	0.537
17	6									286.60	2.27	0.321	0.019	0.556
18	6									286.61	2.28	0.320	0.019	0.575
19	6									286.69	2.35	0.308	0.018	0.593
20	7									286.86	2.53	0.283	0.017	0.610
21	7									287.18	2.85	0.241	0.014	0.624
22	7									287.22	2.89	0.236	0.014	0.638
23	6									287.43	3.09	0.213	0.013	0.650
24	5									287.51	3.18	0.204	0.012	0.662
25	6									287.92	3.59	0.166	0.010	0.672
26	5									288.01	3.68	0.159	0.009	0.681
27	4									288.18	3.84	0.147	0.009	0.690
28	6									288.28	3.94	0.139	0.008	0.698
29	6									288.29	3.96	0.138	0.008	0.706
30	5									288.36	4.02	0.134	0.008	0.714
31	4									288.45	4.12	0.128	0.007	0.722
32	7									288.47	4.13	0.127	0.007	0.729
33	5									288.48	4.14	0.126	0.007	0.736

model average

β	0.14	-0.16	-0.16	-0.22	-0.67	0.53	0.20	-1.38
variance	0.04	0.03	0.04	0.05	0.10	0.08	0.02	0.03
relative importance	0.52	0.58	0.56	0.64	0.99	0.93	0.77	1.00
95% CI	0.36	0.36	0.38	0.43	0.62	0.55	0.30	0.35

Table S3.2. Common Kestrel summer incidence, intercorrelations model (a)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	8																													210.95	0.00	1.000	0.027	0.027
2	7																													211.01	0.06	0.969	0.026	0.053
3	7																													211.07	0.12	0.942	0.025	0.079
4	5																													211.34	0.39	0.824	0.022	0.101
5	9																													211.58	0.63	0.731	0.020	0.121
6	6																													211.69	0.74	0.692	0.019	0.139
7	9																													211.79	0.84	0.656	0.018	0.157
8	8																													211.83	0.88	0.645	0.017	0.175
9	10																													211.86	0.91	0.633	0.017	0.192
10	8																													211.88	0.93	0.627	0.017	0.209
11	6																													211.89	0.94	0.626	0.017	0.226
12	5																													211.96	1.01	0.603	0.016	0.242
13	8																													212.00	1.04	0.593	0.016	0.258
14	4																													212.02	1.07	0.586	0.016	0.274
15	6																													212.20	1.25	0.535	0.014	0.288
16	8																													212.27	1.32	0.516	0.014	0.302
17	7																													212.36	1.41	0.493	0.013	0.316
18	8																													212.48	1.53	0.466	0.013	0.328
19	7																													212.55	1.59	0.451	0.012	0.340
20	8																													212.57	1.62	0.446	0.012	0.352
21	7																													212.61	1.66	0.437	0.012	0.364
22	4																													212.62	1.67	0.434	0.012	0.376
23	6																													212.63	1.68	0.431	0.012	0.388
24	7																													212.72	1.77	0.412	0.011	0.399
25	8																													212.73	1.78	0.411	0.011	0.410
26	9																													212.74	1.79	0.409	0.011	0.421
27	7																													212.79	1.84	0.399	0.011	0.432
28	9																													212.83	1.88	0.391	0.011	0.442
29	5																													212.97	2.02	0.365	0.010	0.452
30	6																													213.01	2.05	0.358	0.010	0.462
31	6																													213.17	2.22	0.329	0.009	0.471
32	7																													213.18	2.23	0.328	0.009	0.480
33	6																													213.26	2.30	0.316	0.009	0.488
34	9																													213.26	2.31	0.315	0.009	0.497
35	7																													213.30	2.35	0.309	0.008	0.505
36	6																													213.35	2.39	0.302	0.008	0.513
37	9																													213.35	2.40	0.302	0.008	0.521
38	6																													213.37	2.42	0.299	0.008	0.529
39	7																													213.42	2.47	0.290	0.008	0.537
40	5																													213.43	2.48	0.289	0.008	0.545
41	5																													213.48	2.53	0.282	0.008	0.553
42	5																													213.58	2.63	0.268	0.007	0.560
43	5																													213.69	2.74	0.254	0.007	0.567

44	6										213.73	2.78	0.249	0.007	0.574
45	6										213.75	2.80	0.247	0.007	0.580
46	3										213.76	2.81	0.245	0.007	0.587
47	7										213.78	2.83	0.243	0.007	0.593
48	6										213.83	2.88	0.236	0.006	0.600
49	5										213.87	2.92	0.232	0.006	0.606
50	6										213.88	2.93	0.231	0.006	0.612
51	7										213.88	2.93	0.231	0.006	0.619
52	6										213.92	2.97	0.226	0.006	0.625
53	7										213.92	2.97	0.226	0.006	0.631
54	5										213.94	2.99	0.224	0.006	0.637
55	6										213.98	3.02	0.220	0.006	0.643
56	5										214.00	3.05	0.217	0.006	0.649
57	5										214.05	3.10	0.212	0.006	0.655
58	8										214.07	3.11	0.211	0.006	0.660
59	8										214.08	3.13	0.210	0.006	0.666
60	4										214.12	3.17	0.205	0.006	0.671
61	7										214.12	3.17	0.205	0.006	0.677
62	8										214.14	3.19	0.203	0.005	0.682
63	8										214.15	3.20	0.202	0.005	0.688
64	7										214.18	3.23	0.199	0.005	0.693
65	7										214.29	3.34	0.189	0.005	0.698
66	7										214.32	3.37	0.185	0.005	0.703
67	8										214.35	3.40	0.183	0.005	0.708
68	7										214.37	3.42	0.181	0.005	0.713
69	3										214.41	3.46	0.177	0.005	0.718
70	6										214.43	3.48	0.176	0.005	0.723
71	6										214.44	3.48	0.175	0.005	0.728
72	4										214.48	3.53	0.171	0.005	0.732
73	7										214.53	3.58	0.167	0.005	0.737
74	4										214.54	3.59	0.166	0.004	0.741
75	7										214.57	3.61	0.164	0.004	0.746
76	7										214.57	3.62	0.164	0.004	0.750
77	6										214.63	3.68	0.159	0.004	0.754
78	6										214.75	3.80	0.150	0.004	0.758
79	6										214.80	3.84	0.146	0.004	0.762
80	8										214.82	3.87	0.145	0.004	0.766
81	6										214.82	3.87	0.144	0.004	0.770
82	6										214.86	3.91	0.142	0.004	0.774
83	7										214.90	3.94	0.139	0.004	0.778
84	8										214.93	3.98	0.137	0.004	0.781
85	5										214.94	3.99	0.136	0.004	0.785
86	6										215.03	4.08	0.130	0.004	0.789
87	7										215.04	4.09	0.130	0.004	0.792
88	7										215.10	4.15	0.126	0.003	0.796

model average

β	0.02	-0.05	-0.02	-0.02	-0.08	0.02	0.03	0.04	0.21
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
relative									
importance	0.40	0.78	0.51	0.45	0.98	0.45	0.47	0.72	1.00
95% CI	0.05	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.06

Table S3.3. Common Kestrel summer incidence, intercorrelations model (c)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	8																												210.95	0.00	1.000	0.081	0.081		
2	7																													211.07	0.12	0.942	0.076	0.157	
3	5																													211.34	0.39	0.824	0.066	0.223	
4	4																													212.02	1.07	0.586	0.047	0.270	
5	6																													212.20	1.25	0.535	0.043	0.313	
6	7																													212.55	1.59	0.451	0.036	0.350	
7	4																													212.62	1.67	0.434	0.035	0.385	
8	6																													212.63	1.68	0.431	0.035	0.419	
9	7																													212.72	1.77	0.412	0.033	0.452	
10	5																													212.97	2.02	0.365	0.029	0.482	
11	6																													213.17	2.22	0.329	0.027	0.508	
12	5																													213.48	2.53	0.282	0.023	0.531	
13	5																													213.58	2.63	0.268	0.022	0.553	
14	6																													213.75	2.80	0.247	0.020	0.573	
15	3																													213.76	2.81	0.245	0.020	0.592	
16	7																													213.78	2.83	0.243	0.020	0.612	
17	6																													213.83	2.88	0.236	0.019	0.631	
18	6																													213.92	2.97	0.226	0.018	0.649	
19	5																													213.94	2.99	0.224	0.018	0.667	
20	5																													214.00	3.05	0.217	0.018	0.685	
21	5																													214.05	3.10	0.212	0.017	0.702	
22	4																													214.12	3.17	0.205	0.017	0.718	
23	7																													214.37	3.42	0.181	0.015	0.733	
24	3																													214.41	3.46	0.177	0.014	0.747	
25	6																													214.43	3.48	0.176	0.014	0.761	
26	4																													214.48	3.53	0.171	0.014	0.775	
27	7																													214.53	3.58	0.167	0.013	0.789	
28	6																													214.63	3.68	0.159	0.013	0.802	
29	6																													214.75	3.80	0.150	0.012	0.814	
30	6																													214.80	3.84	0.146	0.012	0.825	
31	6																													215.03	4.08	0.130	0.010	0.836	
model average																																			
β										-0.04		-0.03																0.03		0.03		0.21			
variance										0.00		0.00																		0.00		0.00		0.00	
relative importance										0.71		0.52																		0.52		0.66		1.00	
95% CI										0.07		0.07																		0.09		0.07		0.06	

Table S3.4. Common Kestrel winter incidence, intercorrelations model (b)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	7																												216.17	0.00	1.000	0.272	0.272			
2	8		■									■	■			■													216.78	0.61	0.739	0.201	0.473			
3	6											■	■																217.32	1.15	0.563	0.153	0.627			
4	6											■																	218.02	1.84	0.398	0.108	0.735			
5	5																												218.12	1.95	0.377	0.103	0.838			
6	7		■										■																219.08	2.91	0.233	0.064	0.901			
7	7											■	■																219.78	3.60	0.165	0.045	0.946			
8	6		■																										220.12	3.95	0.139	0.038	0.984			
model average																																				
	β	0.00									-0.02	-0.02			0.14											-0.10		0.26								
	variance	0.00									0.00	0.00			0.00											0.00		0.00								
	relative importance	0.29									0.47	0.50			1.00											1.00		1.00								
	95% CI	0.03									0.06	0.06			0.06											0.07		0.06								

Table S3.5. Common Kestrel winter incidence, intercorrelations model (c)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	6																												215.67	0.00	1.000	0.048	0.048	
2	7																													216.04	0.38	0.828	0.040	0.087
3	7																													216.17	0.51	0.776	0.037	0.124
4	7																													216.21	0.54	0.764	0.036	0.161
5	8																													216.55	0.88	0.644	0.031	0.192
6	9																													216.61	0.94	0.624	0.030	0.221
7	8																													216.64	0.97	0.615	0.029	0.251
8	8																													216.78	1.11	0.573	0.027	0.278
9	10																													216.79	1.12	0.570	0.027	0.305
10	7																													216.92	1.26	0.534	0.025	0.331
11	8																													216.99	1.33	0.515	0.025	0.355
12	9																													217.11	1.45	0.485	0.023	0.379
13	9																													217.27	1.60	0.448	0.021	0.400
14	7																													217.28	1.62	0.446	0.021	0.421
15	8																													217.31	1.65	0.439	0.021	0.442
16	6																													217.32	1.66	0.437	0.021	0.463
17	9																													217.41	1.74	0.418	0.020	0.483
18	11																													217.43	1.76	0.415	0.020	0.503
19	7																													217.48	1.82	0.403	0.019	0.522
20	8																													217.51	1.84	0.399	0.019	0.541
21	10																													217.53	1.86	0.394	0.019	0.560
22	9																													217.54	1.87	0.393	0.019	0.579
23	8																													217.54	1.88	0.391	0.019	0.598
24	8																													217.58	1.91	0.385	0.018	0.616
25	8																													217.69	2.03	0.363	0.017	0.633
26	9																													217.81	2.14	0.343	0.016	0.650
27	7																													218.00	2.33	0.312	0.015	0.664
28	9																													218.01	2.34	0.310	0.015	0.679
29	6																													218.02	2.35	0.309	0.015	0.694
30	8																													218.09	2.42	0.298	0.014	0.708
31	5																													218.12	2.46	0.293	0.014	0.722
32	8																													218.16	2.49	0.287	0.014	0.736
33	10																													218.43	2.77	0.250	0.012	0.748
34	8																													218.48	2.81	0.245	0.012	0.760
35	9																													218.49	2.82	0.244	0.012	0.771
36	10																													218.58	2.91	0.233	0.011	0.782
37	6																													218.74	3.07	0.215	0.010	0.793
38	7																													218.75	3.08	0.214	0.010	0.803
39	9																													218.78	3.11	0.211	0.010	0.813
40	7																													218.87	3.21	0.201	0.010	0.823
41	9																													218.89	3.23	0.199	0.010	0.832
42	10																													218.90	3.23	0.199	0.009	0.842
43	9																													218.91	3.24	0.198	0.009	0.851

Table S3.6. Chukar summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	12																												367.74	0.00	1.000	0.137	0.137	
2	13																												367.93	0.18	0.912	0.124	0.261	
3	12																												369.06	1.32	0.516	0.070	0.332	
4	11																												369.73	1.99	0.370	0.051	0.382	
5	11																												370.17	2.43	0.296	0.040	0.422	
6	12																												370.24	2.50	0.286	0.039	0.462	
7	11																												371.15	3.41	0.182	0.025	0.486	
8	11																												371.21	3.47	0.176	0.024	0.510	
9	12																												371.24	3.50	0.174	0.024	0.534	
10	11																												371.38	3.64	0.162	0.022	0.556	
11	12																												371.39	3.65	0.162	0.022	0.578	
12	11																												371.72	3.98	0.137	0.019	0.597	
13	10																												371.78	4.04	0.133	0.018	0.615	
model average																																		
β			0.14		0.39						-0.48	0.60		0.66		-1.15	0.81		-0.48		0.55		-0.55											-0.98
variance			0.04		0.08						0.07	0.05		0.06		0.11	0.08		0.08		0.08		0.09											0.04
relative importance			0.46		0.76						0.90	1.00		1.00		1.00	1.00		0.86		0.93		0.91											1.00
95% CI			0.38		0.54						0.50	0.44		0.47		0.67	0.56		0.55		0.53		0.58										0.42	

Table S3.7. Chukar summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	13																													191.10	0.00	1.000	0.059	0.059
2	10																													191.46	0.35	0.838	0.049	0.108
3	12																													191.54	0.44	0.803	0.047	0.155
4	9																													191.83	0.73	0.694	0.041	0.196
5	11																													192.21	1.11	0.574	0.034	0.229
6	11																													192.59	1.48	0.476	0.028	0.257
7	9																													192.67	1.57	0.457	0.027	0.284
8	12																													192.91	1.81	0.405	0.024	0.308
9	10																													193.00	1.90	0.386	0.023	0.331
10	11																													193.01	1.91	0.384	0.023	0.353
11	10																													193.04	1.94	0.379	0.022	0.375
12	8																													193.09	1.99	0.370	0.022	0.397
13	11																													193.09	1.99	0.370	0.022	0.419
14	9																													193.10	2.00	0.367	0.022	0.440
15	12																													193.22	2.12	0.347	0.020	0.461
16	10																													193.47	2.37	0.306	0.018	0.479
17	11																													193.54	2.44	0.295	0.017	0.496
18	10																													193.73	2.63	0.268	0.016	0.512
19	10																													193.78	2.68	0.261	0.015	0.527
20	12																													193.84	2.74	0.254	0.015	0.542
21	12																													193.93	2.83	0.243	0.014	0.556
22	10																													193.98	2.88	0.238	0.014	0.570
23	8																													194.13	3.03	0.219	0.013	0.583
24	11																													194.18	3.07	0.215	0.013	0.596
25	8																													194.33	3.23	0.199	0.012	0.607
26	9																													194.35	3.24	0.197	0.012	0.619
27	10																													194.44	3.34	0.189	0.011	0.630
28	9																													194.48	3.38	0.185	0.011	0.641
29	9																													194.62	3.52	0.172	0.010	0.651
30	11																													194.64	3.53	0.171	0.010	0.661
31	10																													194.64	3.54	0.170	0.010	0.671
32	10																													194.77	3.67	0.160	0.009	0.680
33	10																													194.82	3.72	0.156	0.009	0.689
34	11																													194.89	3.79	0.150	0.009	0.698
35	11																													194.95	3.85	0.146	0.009	0.707
36	9																													195.04	3.94	0.140	0.008	0.715
37	12																													195.06	3.96	0.138	0.008	0.723
38	11																													195.12	4.02	0.134	0.008	0.731

model average											
β	-0.01	-0.02	0.04	0.07	-0.05	0.12	-0.10	-0.03	0.10	-0.10	0.24
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
relative											
importance	0.36	0.40	0.73	0.96	0.70	1.00	1.00	0.51	1.00	1.00	1.00
95% CI	0.04	0.07	0.07	0.06	0.09	0.07	0.07	0.08	0.07	0.07	0.05

Table S3.8. Chukar winter abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	10																													547.88	0.00	1.000	0.056	0.056
2	11																													548.17	0.29	0.866	0.049	0.105
3	9																													548.22	0.34	0.843	0.047	0.152
4	10																													548.55	0.67	0.717	0.040	0.192
5	9																													548.86	0.97	0.615	0.034	0.227
6	10																													549.08	1.19	0.550	0.031	0.257
7	8																													549.08	1.20	0.549	0.031	0.288
8	9																													549.15	1.26	0.531	0.030	0.318
9	9																													549.65	1.77	0.413	0.023	0.341
10	10																													549.68	1.80	0.407	0.023	0.364
11	8																													549.98	2.10	0.350	0.020	0.384
12	9																													550.11	2.22	0.329	0.018	0.402
13	9																													550.18	2.29	0.318	0.018	0.420
14	10																													550.22	2.34	0.311	0.017	0.437
15	9																													550.22	2.34	0.310	0.017	0.455
16	10																													550.23	2.35	0.309	0.017	0.472
17	9																													550.32	2.43	0.296	0.017	0.489
18	8																													550.38	2.50	0.287	0.016	0.505
19	9																													550.47	2.59	0.275	0.015	0.520
20	8																													550.50	2.62	0.270	0.015	0.535
21	9																													550.52	2.63	0.268	0.015	0.550
22	8																													550.53	2.64	0.267	0.015	0.565
23	8																													550.55	2.66	0.264	0.015	0.580
24	9																													550.76	2.88	0.237	0.013	0.593
25	8																													550.89	3.01	0.222	0.012	0.606
26	9																													550.96	3.08	0.215	0.012	0.618
27	8																													550.97	3.09	0.213	0.012	0.630
28	9																													551.08	3.19	0.203	0.011	0.641
29	8																													551.11	3.23	0.199	0.011	0.652
30	7																													551.19	3.31	0.191	0.011	0.663
31	10																													551.22	3.34	0.189	0.011	0.674
32	8																													551.30	3.42	0.181	0.010	0.684
33	7																													551.43	3.54	0.170	0.010	0.693
34	10																													551.56	3.68	0.159	0.009	0.702
35	9																													551.59	3.70	0.157	0.009	0.711
36	9																													551.62	3.74	0.154	0.009	0.720
37	8																													551.79	3.91	0.142	0.008	0.728
38	8																													551.82	3.94	0.139	0.008	0.735
39	7																													551.86	3.98	0.137	0.008	0.743
40	9																													551.87	3.99	0.136	0.008	0.751

model average												
β	-0.33	-0.22		0.17	-0.40	0.11		0.36	0.46	-0.78	0.42	-0.22
variance	0.06	0.05		0.03	0.13	0.02		0.04	0.07	0.04	0.04	0.03
relative												
importance	0.81	0.62		0.63	0.76	0.52		0.90	0.90	1.00	0.94	1.00
95% CI	0.47	0.45		0.36	0.71	0.29		0.37	0.49	0.39	0.36	0.33

Table S3.9. Chukar winter incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	10																													237.92	0.00	1.000	0.015	0.015
2	9																													237.95	0.03	0.984	0.014	0.029
3	11																													238.51	0.60	0.742	0.011	0.040
4	11																													238.53	0.62	0.735	0.011	0.050
5	10																													238.72	0.80	0.670	0.010	0.060
6	8																													238.76	0.85	0.655	0.010	0.069
7	8																													238.79	0.87	0.646	0.009	0.079
8	8																													238.85	0.93	0.629	0.009	0.088
9	9																													238.96	1.04	0.594	0.009	0.097
10	10																													238.97	1.05	0.591	0.009	0.105
11	12																													239.04	1.12	0.571	0.008	0.113
12	8																													239.06	1.15	0.564	0.008	0.122
13	10																													239.12	1.20	0.548	0.008	0.130
14	9																													239.13	1.21	0.545	0.008	0.138
15	9																													239.19	1.28	0.528	0.008	0.145
16	10																													239.20	1.28	0.527	0.008	0.153
17	7																													239.24	1.32	0.517	0.008	0.160
18	9																													239.29	1.37	0.504	0.007	0.168
19	9																													239.29	1.37	0.504	0.007	0.175
20	9																													239.30	1.38	0.501	0.007	0.182
21	10																													239.32	1.40	0.497	0.007	0.189
22	11																													239.35	1.43	0.490	0.007	0.197
23	10																													239.36	1.44	0.486	0.007	0.204
24	8																													239.36	1.45	0.485	0.007	0.211
25	9																													239.41	1.49	0.475	0.007	0.218
26	8																													239.43	1.52	0.468	0.007	0.224
27	11																													239.47	1.55	0.460	0.007	0.231
28	9																													239.48	1.56	0.458	0.007	0.238
29	10																													239.51	1.59	0.451	0.007	0.244
30	9																													239.56	1.64	0.440	0.006	0.251
31	10																													239.57	1.65	0.438	0.006	0.257
32	10																													239.62	1.70	0.427	0.006	0.263
33	7																													239.64	1.73	0.422	0.006	0.269
34	9																													239.67	1.75	0.417	0.006	0.275
35	11																													239.68	1.76	0.414	0.006	0.281
36	8																													239.70	1.79	0.410	0.006	0.287
37	9																													239.73	1.81	0.405	0.006	0.293
38	7																													239.74	1.82	0.403	0.006	0.299
39	7																													239.75	1.83	0.400	0.006	0.305
40	9																													239.78	1.86	0.394	0.006	0.311
41	9																													239.88	1.96	0.375	0.005	0.316
42	8																													239.88	1.96	0.374	0.005	0.321
43	10																													239.93	2.01	0.366	0.005	0.327

44	10									239.93	2.02	0.365	0.005	0.332
45	8									239.99	2.07	0.355	0.005	0.337
46	9									240.00	2.08	0.353	0.005	0.342
47	8									240.01	2.10	0.351	0.005	0.347
48	9									240.04	2.12	0.347	0.005	0.352
49	8									240.04	2.13	0.346	0.005	0.357
50	11									240.07	2.15	0.341	0.005	0.362
51	7									240.07	2.15	0.341	0.005	0.367
52	10									240.10	2.18	0.336	0.005	0.372
53	11									240.12	2.20	0.333	0.005	0.377
54	9									240.14	2.22	0.330	0.005	0.382
55	12									240.15	2.23	0.328	0.005	0.387
56	6									240.18	2.27	0.322	0.005	0.391
57	11									240.20	2.28	0.320	0.005	0.396
58	11									240.20	2.28	0.320	0.005	0.401
59	9									240.21	2.29	0.318	0.005	0.405
60	8									240.24	2.32	0.314	0.005	0.410
61	9									240.25	2.33	0.311	0.005	0.414
62	9									240.26	2.35	0.309	0.004	0.419
63	9									240.31	2.39	0.303	0.004	0.423
64	7									240.31	2.39	0.303	0.004	0.428
65	8									240.31	2.39	0.302	0.004	0.432
66	9									240.32	2.41	0.300	0.004	0.436
67	12									240.33	2.41	0.300	0.004	0.441
68	8									240.37	2.45	0.294	0.004	0.445
69	6									240.37	2.45	0.294	0.004	0.449
70	10									240.37	2.45	0.293	0.004	0.453
71	8									240.37	2.45	0.293	0.004	0.458
72	7									240.38	2.46	0.292	0.004	0.462
73	10									240.43	2.51	0.285	0.004	0.466
74	9									240.43	2.52	0.284	0.004	0.470
75	10									240.44	2.52	0.283	0.004	0.474
76	9									240.46	2.55	0.280	0.004	0.478
77	8									240.47	2.56	0.279	0.004	0.482
78	11									240.48	2.56	0.278	0.004	0.486
79	8									240.48	2.56	0.278	0.004	0.490
80	8									240.52	2.60	0.273	0.004	0.494
81	10									240.52	2.60	0.272	0.004	0.498
82	10									240.53	2.61	0.271	0.004	0.502
83	9									240.56	2.64	0.267	0.004	0.506
84	10									240.64	2.72	0.257	0.004	0.510
85	11									240.65	2.74	0.255	0.004	0.514
86	7									240.67	2.76	0.252	0.004	0.517
87	9									240.68	2.76	0.252	0.004	0.521
88	10									240.69	2.77	0.250	0.004	0.525
89	8									240.69	2.77	0.250	0.004	0.528
90	10									240.70	2.78	0.249	0.004	0.532
91	8									240.70	2.78	0.249	0.004	0.535
92	11									240.71	2.79	0.248	0.004	0.539
93	12									240.72	2.80	0.247	0.004	0.543
94	9									240.73	2.81	0.245	0.004	0.546
95	10									240.75	2.84	0.242	0.004	0.550
96	10									240.76	2.84	0.242	0.004	0.553
97	9									240.77	2.85	0.241	0.003	0.557
98	10									240.78	2.86	0.239	0.003	0.560

99	9																	240.78	2.86	0.239	0.003	0.564	
100	10																		240.79	2.87	0.238	0.003	0.567
101	9																		240.80	2.88	0.236	0.003	0.571
102	10																		240.85	2.94	0.230	0.003	0.574
103	7																		240.86	2.94	0.230	0.003	0.577
104	7																		240.86	2.94	0.229	0.003	0.581
105	13																		240.90	2.98	0.226	0.003	0.584
106	9																		240.90	2.98	0.225	0.003	0.587
107	8																		240.93	3.01	0.222	0.003	0.590
108	10																		240.96	3.04	0.219	0.003	0.593
109	11																		240.97	3.05	0.217	0.003	0.597
110	8																		241.04	3.12	0.210	0.003	0.600
111	7																		241.04	3.13	0.209	0.003	0.603
112	6																		241.05	3.13	0.209	0.003	0.606
113	8																		241.06	3.15	0.207	0.003	0.609
114	7																		241.07	3.15	0.207	0.003	0.612
115	8																		241.07	3.15	0.207	0.003	0.615
116	10																		241.08	3.17	0.205	0.003	0.618
117	10																		241.14	3.22	0.200	0.003	0.621
118	9																		241.16	3.24	0.198	0.003	0.623
119	11																		241.16	3.24	0.198	0.003	0.626
120	8																		241.16	3.24	0.198	0.003	0.629
121	6																		241.17	3.25	0.197	0.003	0.632
122	9																		241.17	3.25	0.197	0.003	0.635
123	9																		241.17	3.26	0.196	0.003	0.638
124	8																		241.19	3.27	0.195	0.003	0.641
125	8																		241.19	3.27	0.194	0.003	0.643
126	10																		241.21	3.29	0.193	0.003	0.646
127	12																		241.21	3.30	0.193	0.003	0.649
128	9																		241.22	3.30	0.192	0.003	0.652
129	9																		241.23	3.31	0.191	0.003	0.655
130	9																		241.25	3.33	0.189	0.003	0.657
131	11																		241.25	3.34	0.189	0.003	0.660
132	8																		241.26	3.34	0.188	0.003	0.663
133	8																		241.27	3.35	0.187	0.003	0.666
134	9																		241.29	3.37	0.185	0.003	0.668
135	10																		241.31	3.39	0.184	0.003	0.671
136	9																		241.33	3.41	0.182	0.003	0.674
137	7																		241.35	3.43	0.180	0.003	0.676
138	7																		241.37	3.45	0.178	0.003	0.679
139	10																		241.37	3.46	0.178	0.003	0.681
140	9																		241.37	3.46	0.178	0.003	0.684
141	10																		241.38	3.46	0.177	0.003	0.686
142	8																		241.38	3.46	0.177	0.003	0.689
143	7																		241.39	3.47	0.176	0.003	0.692
144	8																		241.39	3.48	0.176	0.003	0.694
145	8																		241.40	3.48	0.175	0.003	0.697
146	8																		241.40	3.49	0.175	0.003	0.699
147	7																		241.41	3.49	0.175	0.003	0.702
148	9																		241.42	3.50	0.174	0.003	0.704
149	8																		241.44	3.52	0.172	0.002	0.707
150	8																		241.44	3.52	0.172	0.002	0.709
151	9																		241.44	3.52	0.172	0.002	0.712
152	9																		241.44	3.52	0.172	0.002	0.714
153	10																		241.48	3.56	0.169	0.002	0.717

154	7														241.51	3.60	0.166	0.002	0.719
155	10														241.53	3.61	0.165	0.002	0.721
156	9														241.56	3.64	0.162	0.002	0.724
157	9														241.59	3.68	0.159	0.002	0.726
158	9														241.60	3.69	0.158	0.002	0.728
159	10														241.60	3.69	0.158	0.002	0.731
160	8														241.61	3.69	0.158	0.002	0.733
161	8														241.63	3.71	0.156	0.002	0.735
162	11														241.63	3.72	0.156	0.002	0.738
163	10														241.64	3.73	0.155	0.002	0.740
164	9														241.68	3.76	0.153	0.002	0.742
165	10														241.73	3.81	0.149	0.002	0.744
166	7														241.73	3.82	0.148	0.002	0.746
167	8														241.74	3.83	0.148	0.002	0.748
168	7														241.76	3.84	0.147	0.002	0.751
169	8														241.78	3.86	0.145	0.002	0.753
170	11														241.79	3.88	0.144	0.002	0.755
171	7														241.79	3.88	0.144	0.002	0.757
172	5														241.80	3.88	0.144	0.002	0.759
173	7														241.80	3.88	0.144	0.002	0.761
174	8														241.82	3.90	0.142	0.002	0.763
175	10														241.82	3.90	0.142	0.002	0.765
176	10														241.84	3.93	0.140	0.002	0.767
177	9														241.85	3.93	0.140	0.002	0.769
178	9														241.89	3.97	0.137	0.002	0.771
179	9														241.92	4.01	0.135	0.002	0.773
180	11														241.93	4.01	0.135	0.002	0.775
181	8														241.94	4.02	0.134	0.002	0.777
182	10														241.97	4.05	0.132	0.002	0.779
183	7														241.97	4.06	0.132	0.002	0.781
184	8														241.98	4.06	0.131	0.002	0.783
185	9														241.98	4.07	0.131	0.002	0.785
186	11														242.01	4.09	0.129	0.002	0.787
187	8														242.01	4.10	0.129	0.002	0.789
188	8														242.04	4.12	0.127	0.002	0.790
189	8														242.05	4.14	0.126	0.002	0.792
190	12														242.05	4.14	0.126	0.002	0.794
191	10														242.06	4.14	0.126	0.002	0.796
192	8														242.07	4.15	0.126	0.002	0.798

model average

β	-0.04	-0.02	0.06	0.04	-0.01	0.03	0.06	0.19	-0.12	-0.02	0.01	0.35
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
relative												
importance	0.68	0.41	0.82	0.68	0.38	0.58	0.84	1.00	1.00	0.39	0.31	1.00
95% CI	0.07	0.06	0.08	0.08	0.05	0.07	0.08	0.08	0.08	0.06	0.04	0.06

Table S3.10. Black Francolin summer abundance, intercorrelations model (a)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	10																													296.36	0.00	1.000	0.131	0.131			
2	9																													296.96	0.60	0.742	0.097	0.229			
3	9																													297.18	0.82	0.664	0.087	0.316			
4	8																													298.02	1.66	0.437	0.057	0.373			
5	8																													298.04	1.67	0.433	0.057	0.430			
6	9																													298.37	2.01	0.366	0.048	0.478			
7	8																													298.65	2.28	0.319	0.042	0.520			
8	9																													298.79	2.42	0.298	0.039	0.559			
9	7																													298.82	2.46	0.293	0.038	0.598			
10	8																													299.14	2.78	0.249	0.033	0.631			
11	8																													299.40	3.03	0.219	0.029	0.659			
12	7																													299.43	3.06	0.216	0.028	0.688			
13	7																													299.53	3.17	0.205	0.027	0.715			
14	8																													299.59	3.22	0.200	0.026	0.741			
15	8																													299.71	3.35	0.187	0.025	0.766			
16	6																													300.09	3.73	0.155	0.020	0.786			
17	7																													300.09	3.73	0.155	0.020	0.806			
18	9																													300.11	3.74	0.154	0.020	0.827			
19	8																													300.24	3.87	0.144	0.019	0.846			
20	7																													300.27	3.91	0.142	0.019	0.864			
model average																																					
	β			-0.22							-0.14								0.19		-0.60																
	variance			0.03							0.03								0.03		0.03																
	relative																																				
	importance			0.74							0.54								0.70		1.00																
	95% CI			0.36							0.35								0.32		0.36																

Table S3.11. Black Francolin summer abundance, intercorrelations model (c)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	10																												296.76	0.00	1.000	0.089	0.089			
2	9																												296.96	0.20	0.907	0.080	0.169			
3	9																												297.77	1.01	0.604	0.053	0.222			
4	9																												297.84	1.08	0.584	0.052	0.274			
5	8																												298.02	1.26	0.534	0.047	0.321			
6	8																												298.04	1.27	0.529	0.047	0.368			
7	7																												298.06	1.29	0.524	0.046	0.414			
8	9																												298.08	1.32	0.517	0.046	0.460			
9	8																												298.16	1.40	0.497	0.044	0.504			
10	8																												298.33	1.56	0.458	0.041	0.545			
11	9																												298.35	1.59	0.452	0.040	0.585			
12	8																												298.65	1.88	0.390	0.035	0.619			
13	7																												298.82	2.06	0.357	0.032	0.651			
14	8																												298.83	2.07	0.355	0.031	0.682			
15	6																												299.04	2.27	0.321	0.028	0.711			
16	8																												299.09	2.32	0.313	0.028	0.739			
17	7																												299.29	2.53	0.283	0.025	0.764			
18	7																												299.30	2.53	0.282	0.025	0.788			
19	8																												299.40	2.63	0.268	0.024	0.812			
20	7																												299.53	2.77	0.251	0.022	0.834			
21	7																												299.90	3.14	0.208	0.018	0.853			
22	6																												300.09	3.33	0.190	0.017	0.870			
23	7																												300.09	3.33	0.189	0.017	0.886			
24	8																												300.24	3.47	0.176	0.016	0.902			
25	7																												300.27	3.51	0.173	0.015	0.917			
26	8																												300.33	3.57	0.168	0.015	0.932			
model average																																				
	β			-0.18							-0.16			0.23						0.14		-0.55					-0.91	0.23	0.44	-1.51						
	variance			0.03							0.04			0.05					0.02		0.04						0.09	0.05	0.01	0.04						
	relative importance			0.67							0.57			0.67					0.59		1.00						1.00	0.67	1.00	1.00						
	95% CI			0.35							0.36			0.43					0.31		0.38						0.59	0.44	0.22	0.39						

Table S3.12. Black Francolin summer abundance, intercorrelations model (d)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	10																													296.36	0.00	1.000	0.076	0.076
2	11	■		■							■									■	■			■		■				296.92	0.55	0.759	0.058	0.134
3	9										■																			296.96	0.60	0.742	0.056	0.190
4	9										■																			297.18	0.82	0.664	0.051	0.241
5	10	■		■							■									■	■			■		■				297.67	1.30	0.522	0.040	0.281
6	10	■		■							■									■	■			■		■				297.95	1.59	0.452	0.034	0.315
7	8										■																			298.02	1.66	0.437	0.033	0.348
8	8										■																			298.04	1.67	0.433	0.033	0.381
9	9										■									■	■			■		■				298.37	2.01	0.366	0.028	0.409
10	8										■																			298.65	2.28	0.319	0.024	0.433
11	9										■																			298.79	2.42	0.298	0.023	0.456
12	10	■		■							■									■	■			■		■				298.82	2.45	0.293	0.022	0.478
13	7										■																			298.82	2.46	0.293	0.022	0.501
14	9	■		■							■									■	■			■		■				298.95	2.58	0.275	0.021	0.522
15	8										■																			299.14	2.78	0.249	0.019	0.540
16	9	■		■							■									■	■			■		■				299.18	2.82	0.244	0.019	0.559
17	9	■		■							■									■	■			■		■				299.23	2.86	0.239	0.018	0.577
18	8										■																			299.40	3.03	0.219	0.017	0.594
19	9	■		■							■									■	■			■		■				299.41	3.04	0.219	0.017	0.611
20	7										■																			299.43	3.06	0.216	0.016	0.627
21	7										■																			299.53	3.17	0.205	0.016	0.643
22	8										■																			299.59	3.22	0.200	0.015	0.658
23	8										■																			299.71	3.35	0.187	0.014	0.672
24	10	■		■							■									■	■			■		■				299.81	3.44	0.179	0.014	0.686
25	8	■		■							■									■	■			■		■				299.82	3.45	0.178	0.014	0.699
26	6										■																			300.09	3.73	0.155	0.012	0.711
27	7										■																			300.09	3.73	0.155	0.012	0.723
28	9										■									■	■			■		■				300.11	3.74	0.154	0.012	0.735
29	10	■		■							■									■	■			■		■				300.16	3.79	0.150	0.011	0.746
30	9	■		■							■									■	■			■		■				300.17	3.80	0.149	0.011	0.757
31	8										■																			300.24	3.87	0.144	0.011	0.768
32	7										■																			300.27	3.91	0.142	0.011	0.779
33	8	■		■							■									■	■			■		■				300.31	3.95	0.139	0.011	0.790
34	9	■		■							■									■	■			■		■				300.32	3.95	0.139	0.011	0.800
model average																																		
β		0.05	-0.23								-0.15									0.22	-0.58			-0.24	-0.79	0.34	0.48	-1.54						
variance		0.01	0.03								0.04									0.03	0.04			0.08	0.07	0.05	0.01	0.04						
relative importance		0.37	0.77								0.56									0.77	1.00			0.59	1.00	0.86	1.00	1.00						
95% CI		0.17	0.36								0.36									0.33	0.37			0.54	0.53	0.42	0.23	0.41						

Table S3.13. Black Francolin summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	8																												195.66	0.00	1.000	0.102	0.102			
2	7																													197.03	1.37	0.504	0.051	0.154		
3	9																													197.17	1.51	0.470	0.048	0.201		
4	9																													197.29	1.63	0.444	0.045	0.247		
5	7																													197.57	1.91	0.386	0.039	0.286		
6	8																													197.63	1.97	0.374	0.038	0.324		
7	7																													198.01	2.35	0.309	0.032	0.356		
8	8																													198.51	2.85	0.241	0.025	0.380		
9	8																													198.54	2.88	0.237	0.024	0.405		
10	8																													198.70	3.04	0.219	0.022	0.427		
11	6																													198.73	3.07	0.216	0.022	0.449		
12	6																													198.94	3.28	0.194	0.020	0.469		
13	10																													198.98	3.31	0.191	0.019	0.488		
14	7																													199.14	3.47	0.176	0.018	0.506		
15	8																													199.14	3.48	0.176	0.018	0.524		
16	7																													199.31	3.65	0.161	0.016	0.541		
17	6																													199.36	3.70	0.157	0.016	0.557		
18	7																													199.54	3.88	0.144	0.015	0.571		
19	8																													199.56	3.90	0.143	0.015	0.586		
20	8																													199.57	3.90	0.142	0.014	0.600		
21	9																													199.57	3.91	0.142	0.014	0.615		
22	7																													199.66	4.00	0.135	0.014	0.629		
23	7																													199.70	4.04	0.133	0.014	0.642		
model average																																				
β		0.04	-0.06										0.00						0.04	-0.07				-0.01	-0.04		0.13	0.24								
variance		0.00	0.00										0.00						0.00	0.00				0.00	0.00		0.00	0.00								
relative																																				
importance		0.73	0.93										0.25						0.80	0.98				0.34	0.71		1.00	1.00								
95% CI		0.06	0.06										0.02						0.06	0.06				0.04	0.08		0.06	0.05								

Table S3.14. Common Quail summer incidence

Land-cover buffer scale: 1 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	10																												18.99	0.00	1.000	0.029	0.029	
2	9																												19.22	0.22	0.894	0.026	0.055	
3	10																												19.23	0.24	0.888	0.026	0.081	
4	11																												19.55	0.56	0.755	0.022	0.103	
5	10																												20.00	1.01	0.605	0.018	0.120	
6	11																												20.30	1.31	0.520	0.015	0.135	
7	11																												20.34	1.35	0.510	0.015	0.150	
8	11																												20.66	1.66	0.435	0.013	0.163	
9	11																												20.68	1.69	0.431	0.012	0.175	
10	11																												20.73	1.74	0.419	0.012	0.187	
11	12																												20.92	1.93	0.380	0.011	0.198	
12	10																												20.96	1.97	0.373	0.011	0.209	
13	11																												20.99	2.00	0.368	0.011	0.220	
14	10																												21.01	2.02	0.364	0.011	0.230	
15	12																												21.03	2.04	0.361	0.010	0.241	
16	9																												21.04	2.04	0.360	0.010	0.251	
17	10																												21.05	2.06	0.357	0.010	0.262	
18	11																												21.06	2.07	0.355	0.010	0.272	
19	11																												21.16	2.17	0.337	0.010	0.282	
20	12																												21.42	2.43	0.296	0.009	0.290	
21	12																												21.55	2.56	0.278	0.008	0.298	
22	11																												21.66	2.67	0.264	0.008	0.306	
23	8																												21.66	2.67	0.263	0.008	0.314	
24	10																												21.71	2.71	0.257	0.007	0.321	
25	9																												21.75	2.76	0.252	0.007	0.328	
26	9																												21.82	2.83	0.243	0.007	0.335	
27	9																												21.87	2.88	0.237	0.007	0.342	
28	11																												21.88	2.89	0.236	0.007	0.349	
29	12																												21.90	2.91	0.234	0.007	0.356	
30	11																												21.90	2.91	0.233	0.007	0.363	
31	12																												21.94	2.95	0.229	0.007	0.369	
32	12																												22.12	3.13	0.209	0.006	0.375	
33	12																												22.17	3.18	0.204	0.006	0.381	
34	8																												22.19	3.19	0.202	0.006	0.387	
35	12																												22.22	3.23	0.199	0.006	0.393	
36	12																												22.24	3.25	0.197	0.006	0.399	
37	12																												22.29	3.30	0.192	0.006	0.404	
38	9																												22.32	3.33	0.189	0.005	0.410	
39	10																												22.39	3.40	0.182	0.005	0.415	
40	10																												22.42	3.43	0.180	0.005	0.420	
41	10																												22.43	3.44	0.179	0.005	0.425	
42	9																												22.44	3.45	0.178	0.005	0.431	
43	12																												22.48	3.49	0.175	0.005	0.436	

44	9														22.49	3.50	0.174	0.005	0.441
45	9														22.49	3.50	0.174	0.005	0.446
46	8														22.53	3.54	0.170	0.005	0.451
47	13														22.53	3.54	0.170	0.005	0.456
48	12														22.59	3.60	0.165	0.005	0.460
49	13														22.61	3.62	0.164	0.005	0.465
50	13														22.64	3.65	0.162	0.005	0.470
51	11														22.65	3.66	0.161	0.005	0.474
52	12														22.66	3.66	0.160	0.005	0.479
53	12														22.67	3.68	0.159	0.005	0.484
54	11														22.71	3.72	0.155	0.005	0.488
55	10														22.72	3.73	0.155	0.004	0.493
56	8														22.78	3.79	0.151	0.004	0.497
57	13														22.85	3.86	0.145	0.004	0.501
58	10														22.88	3.88	0.143	0.004	0.505
59	10														22.90	3.91	0.142	0.004	0.510
60	11														22.97	3.97	0.137	0.004	0.514
61	10														22.97	3.98	0.137	0.004	0.518
62	12														22.98	3.98	0.136	0.004	0.521
63	10														23.01	4.02	0.134	0.004	0.525
64	13														23.03	4.04	0.133	0.004	0.529
65	10														23.05	4.06	0.132	0.004	0.533

model average

β	-0.04	0.00	-0.06	-0.06	0.01	0.03														
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00												
relative									0.00	-0.04	-0.01									
importance	0.95	0.18	1.00	1.00	0.43	0.88	1.00	0.19	0.00	0.00	0.00									
95% CI	0.04	0.01	0.04	0.04	0.03	0.04	0.04	0.01	0.01	0.04	0.03									

Table S3.15. Turtle Dove summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	9																												234.14	0.00	1.000	0.148	0.148		
2	8				■																								234.57	0.42	0.809	0.120	0.268		
3	7																												235.50	1.36	0.507	0.075	0.343		
4	8												■																235.53	1.39	0.500	0.074	0.417		
5	7																												235.75	1.61	0.447	0.066	0.483		
6	6																												236.15	2.01	0.367	0.054	0.538		
7	8				■																								236.19	2.05	0.359	0.053	0.591		
8	8												■																236.45	2.31	0.316	0.047	0.638		
9	7				■																								236.88	2.73	0.255	0.038	0.675		
10	7																												237.28	3.13	0.209	0.031	0.706		
11	6																												237.95	3.81	0.149	0.022	0.728		
12	7																												238.04	3.90	0.142	0.021	0.749		
13	6																												238.04	3.90	0.142	0.021	0.770		
14	7				■																								238.12	3.98	0.137	0.020	0.791		
15	5				■																								238.27	4.13	0.127	0.019	0.809		
model average																																			
	β				0.37							0.09		1.07						0.39					-0.49	-1.49		-2.04							
	variance				0.07							0.03		0.05						0.09					0.35	0.16		0.08							
	relative importance				0.79							0.39		1.00						0.79					0.61	1.00		1.00							
	95% CI				0.53							0.29		0.46						0.57					1.16	0.79		0.55							

Table S3.16. Turtle Dove summer incidence, intercorrelations model (a)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																												157.70	0.00	1.000	0.039	0.039	
2	8																													157.98	0.28	0.871	0.034	0.073
3	10																													158.24	0.54	0.765	0.030	0.102
4	8																													158.28	0.58	0.749	0.029	0.131
5	10																													158.52	0.82	0.664	0.026	0.157
6	7																													158.52	0.82	0.664	0.026	0.183
7	9																													158.67	0.96	0.617	0.024	0.207
8	7																													158.69	0.98	0.611	0.024	0.230
9	8																													158.75	1.05	0.593	0.023	0.253
10	9																													158.77	1.06	0.588	0.023	0.276
11	9																													158.81	1.11	0.574	0.022	0.298
12	9																													158.85	1.14	0.565	0.022	0.320
13	11																													158.93	1.22	0.543	0.021	0.341
14	8																													159.10	1.39	0.498	0.019	0.361
15	10																													159.19	1.48	0.477	0.018	0.379
16	8																													159.22	1.52	0.468	0.018	0.397
17	10																													159.37	1.66	0.435	0.017	0.414
18	6																													159.42	1.72	0.424	0.016	0.431
19	8																													159.48	1.78	0.411	0.016	0.447
20	8																													159.53	1.82	0.402	0.016	0.462
21	9																													159.53	1.83	0.401	0.016	0.478
22	9																													159.56	1.86	0.395	0.015	0.493
23	9																													159.75	2.04	0.360	0.014	0.507
24	6																													159.85	2.14	0.342	0.013	0.520
25	7																													159.89	2.19	0.335	0.013	0.533
26	7																													160.00	2.30	0.317	0.012	0.546
27	9																													160.10	2.40	0.301	0.012	0.557
28	10																													160.23	2.52	0.283	0.011	0.568
29	7																													160.24	2.53	0.282	0.011	0.579
30	7																													160.34	2.64	0.267	0.010	0.590
31	7																													160.43	2.73	0.256	0.010	0.599
32	8																													160.53	2.82	0.244	0.009	0.609
33	7																													160.59	2.88	0.237	0.009	0.618
34	8																													160.73	3.02	0.221	0.009	0.627
35	7																													160.76	3.06	0.217	0.008	0.635
36	8																													160.76	3.06	0.217	0.008	0.643
37	7																													160.83	3.13	0.209	0.008	0.652
38	8																													160.83	3.13	0.209	0.008	0.660
39	7																													160.95	3.25	0.197	0.008	0.667
40	8																													160.96	3.26	0.196	0.008	0.675
41	6																													161.02	3.31	0.191	0.007	0.682
42	8																													161.04	3.33	0.189	0.007	0.690
43	8																													161.09	3.38	0.184	0.007	0.697

44	9									161.15	3.44	0.179	0.007	0.704
45	7									161.18	3.48	0.176	0.007	0.711
46	8									161.29	3.58	0.167	0.006	0.717
47	7									161.40	3.69	0.158	0.006	0.723
48	8									161.41	3.71	0.157	0.006	0.729
49	8									161.45	3.74	0.154	0.006	0.735
50	8									161.47	3.76	0.152	0.006	0.741
51	8									161.60	3.89	0.143	0.006	0.747
52	9									161.64	3.93	0.140	0.005	0.752
53	9									161.77	4.07	0.131	0.005	0.757
54	9									161.77	4.07	0.131	0.005	0.762
55	8									161.79	4.08	0.130	0.005	0.767
56	9									161.80	4.10	0.129	0.005	0.772
57	8									161.85	4.15	0.126	0.005	0.777
58	8									161.87	4.16	0.125	0.005	0.782

model average

β	0.02	0.05	0.03	0.09	0.05	0.04	-0.01	-0.09	0.16
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
relative importance	0.50	0.89	0.65	1.00	0.84	0.63	0.41	0.97	1.00
95% CI	0.05	0.06	0.06	0.06	0.07	0.08	0.04	0.07	0.05

Table S3.17. Turtle Dove summer incidence, intercorrelations model (c)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	8																												158.28	0.00	1.000	0.070	0.070			
2	7																												158.69	0.41	0.816	0.058	0.128			
3	9																												158.77	0.48	0.785	0.055	0.183			
4	9																												158.85	0.56	0.754	0.053	0.236			
5	8																												159.10	0.82	0.665	0.047	0.283			
6	10																												159.19	0.90	0.636	0.045	0.328			
7	8																												159.48	1.20	0.549	0.039	0.367			
8	9																												159.75	1.46	0.481	0.034	0.401			
9	6																												159.85	1.57	0.457	0.032	0.433			
10	7																												160.00	1.72	0.423	0.030	0.463			
11	7																												160.24	1.96	0.376	0.026	0.489			
12	8																												160.53	2.24	0.326	0.023	0.512			
13	7																												160.76	2.48	0.290	0.020	0.532			
14	8																												160.76	2.48	0.290	0.020	0.553			
15	7																												160.83	2.55	0.280	0.020	0.573			
16	7																												160.95	2.67	0.263	0.019	0.591			
17	6																												161.02	2.73	0.255	0.018	0.609			
18	8																												161.09	2.80	0.246	0.017	0.626			
19	9																												161.15	2.87	0.239	0.017	0.643			
20	8																												161.29	3.01	0.222	0.016	0.659			
21	7																												161.40	3.11	0.211	0.015	0.674			
22	8																												161.60	3.32	0.190	0.013	0.687			
23	8																												161.85	3.57	0.168	0.012	0.699			
24	8																												161.87	3.58	0.167	0.012	0.711			
25	9																												162.00	3.72	0.156	0.011	0.722			
26	7																												162.11	3.83	0.148	0.010	0.732			
27	8																												162.36	4.08	0.130	0.009	0.741			
model average																																				
	β			0.02	0.05								0.04			0.08					0.07				-0.01	-0.07			0.16							
	variance			0.00	0.00								0.00			0.00					0.00				0.00	0.00			0.00							
	relative importance			0.55	0.84								0.75			1.00					1.00				0.44	0.93			1.00							
	95% CI			0.06	0.06								0.06			0.06					0.06				0.04	0.07			0.05							

Table S3.18. Great Spotted Cuckoo summer abundance

Land-cover buffer scale: 0.75 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	8																												180.75	0.00	1.000	0.276	0.276		
2	9																													181.36	0.60	0.739	0.204	0.479	
3	9																													182.70	1.95	0.377	0.104	0.583	
4	10																													183.29	2.54	0.281	0.077	0.661	
5	8																													184.91	4.15	0.125	0.035	0.695	
model average																																			
	β		2.77	-0.15				0.80				0.67			2.19				2.24	1.57								0.01	-3.13						
	variance		1.37	0.06				0.09				0.06			0.76				1.10	0.77								0.01	0.41						
	relative importance		1.00	0.45				1.00				1.00			1.00				1.00	0.95								0.26	1.00						
	95% CI		2.29	0.44				0.57				0.46			1.71				2.05	1.69								0.12	1.25						

Table S3.19. Great Spotted Cuckoo summer incidence

Land-cover buffer scale: 0.75 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	7																													96.43	0.00	1.000	0.292	0.292	
2	6																													97.19	0.76	0.683	0.200	0.492	
3	8																													98.43	2.00	0.368	0.108	0.600	
4	7																													99.18	2.75	0.253	0.074	0.674	
5	6																													99.61	3.18	0.204	0.060	0.733	
6	5																													100.12	3.69	0.158	0.046	0.779	
model average																																			
	β	0.06	-0.02					0.05				0.09				0.06													0.00	0.11					
	variance	0.00	0.00					0.00				0.00				0.00													0.00	0.00					
	relative importance	0.94	0.59					0.92				1.00				1.00													0.23	1.00					
	95% CI	0.05	0.05					0.05				0.05				0.05													0.01	0.04					

Table S3.20. European Roller summer incidence, \hat{p} as offset

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	6																												39.75	0.00	1.000	0.107	0.107				
2	5																													39.99	0.24	0.889	0.095	0.202			
3	7																													40.58	0.83	0.662	0.071	0.272			
4	7																													41.50	1.74	0.418	0.045	0.317			
5	6																													41.60	1.85	0.397	0.042	0.360			
6	6																													41.62	1.87	0.393	0.042	0.402			
7	7																													41.75	2.00	0.368	0.039	0.441			
8	6																													41.93	2.17	0.337	0.036	0.477			
9	5																													41.98	2.23	0.328	0.035	0.512			
10	4																													42.20	2.45	0.294	0.031	0.543			
11	8																													42.28	2.53	0.283	0.030	0.574			
12	8																													42.43	2.67	0.263	0.028	0.602			
13	7																													43.36	3.61	0.165	0.018	0.619			
14	6																													43.45	3.70	0.158	0.017	0.636			
15	6																													43.46	3.70	0.157	0.017	0.653			
16	8																													43.50	3.74	0.154	0.016	0.669			
17	5																													43.52	3.77	0.152	0.016	0.686			
18	7																													43.55	3.79	0.150	0.016	0.702			
19	7																													43.57	3.81	0.149	0.016	0.717			
20	6																													43.61	3.85	0.146	0.016	0.733			
21	6																													43.83	4.08	0.130	0.014	0.747			
model average																																					
	β		0.07		0.03										0.02					0.00	0.01							0.05		0.08							
	variance		0.00		0.00										0.00					0.00	0.00							0.00		0.00							
	relative importance																																				
	importance		1.00		0.83										0.60					0.25	0.33							0.94		1.00							
	95% CI		0.05		0.04										0.04					0.01	0.02							0.05		0.04							

Table S3.21. Eurasian Hoopoe summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	9	█																											192.99	0.00	1.000	0.064	0.064		
2	10	█			█				█						█				█	█				█					193.12	0.14	0.933	0.060	0.123		
3	10	█																						█	█				193.31	0.33	0.848	0.054	0.178		
4	11	█			█																				█				193.33	0.34	0.843	0.054	0.231		
5	9	█							█																				193.62	0.63	0.729	0.047	0.278		
6	8	█																											193.68	0.69	0.708	0.045	0.323		
7	10	█																							█				193.96	0.98	0.614	0.039	0.362		
8	7	█																											194.64	1.65	0.437	0.028	0.390		
9	8	█																											194.73	1.75	0.417	0.027	0.417		
10	7	█																											194.86	1.87	0.393	0.025	0.442		
11	8	█																											194.97	1.99	0.370	0.024	0.466		
12	9	█							█																				195.04	2.05	0.358	0.023	0.489		
13	10	█																											195.12	2.13	0.344	0.022	0.510		
14	9	█																											195.33	2.34	0.310	0.020	0.530		
15	9	█							█																				195.33	2.34	0.310	0.020	0.550		
16	9	█																											195.38	2.40	0.301	0.019	0.569		
17	9	█							█																				195.39	2.40	0.301	0.019	0.588		
18	6	█																											195.58	2.60	0.273	0.017	0.606		
19	9	█																											195.73	2.75	0.253	0.016	0.622		
20	8	█																											195.77	2.79	0.248	0.016	0.638		
21	8	█																											196.16	3.18	0.204	0.013	0.651		
22	8	█																											196.32	3.33	0.189	0.012	0.663		
23	8	█							█																				196.35	3.37	0.186	0.012	0.675		
24	8	█																											196.35	3.37	0.186	0.012	0.687		
25	8	█																											196.51	3.53	0.171	0.011	0.698		
26	10	█							█																				196.65	3.66	0.160	0.010	0.708		
27	7	█																											196.96	3.98	0.137	0.009	0.717		
28	7	█																											196.98	3.99	0.136	0.009	0.725		
model average																																			
	β	0.47			0.44				0.13						0.45					0.33	0.61			1.11	0.12				-2.37						
	variance	0.03			0.10				0.05						0.12					0.14	0.06			0.06	0.05				0.10						
	relative importance																																		
	95% CI	0.35			0.62				0.38						0.66					0.71	0.48			0.49	0.38				0.63						

Table S3.22. Eurasian Hoopoe summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	7																												119.32	0.00	1.000	0.033	0.033	
2	6																													119.66	0.35	0.841	0.028	0.061
3	8																													120.56	1.24	0.538	0.018	0.078
4	8																													120.76	1.45	0.485	0.016	0.094
5	8																													120.78	1.47	0.481	0.016	0.110
6	8																													120.88	1.56	0.458	0.015	0.125
7	7																													121.03	1.71	0.426	0.014	0.139
8	7																													121.07	1.75	0.416	0.014	0.153
9	7																													121.15	1.84	0.399	0.013	0.166
10	5																													121.25	1.93	0.381	0.013	0.178
11	8																													121.28	1.97	0.374	0.012	0.191
12	7																													121.30	1.98	0.372	0.012	0.203
13	6																													121.34	2.02	0.364	0.012	0.215
14	9																													121.52	2.20	0.333	0.011	0.226
15	7																													121.59	2.28	0.320	0.011	0.236
16	7																													121.81	2.49	0.288	0.009	0.246
17	9																													121.82	2.50	0.286	0.009	0.255
18	9																													121.86	2.55	0.280	0.009	0.264
19	7																													121.92	2.60	0.273	0.009	0.273
20	8																													121.97	2.66	0.265	0.009	0.282
21	8																													122.08	2.76	0.252	0.008	0.290
22	6																													122.13	2.82	0.245	0.008	0.298
23	9																													122.14	2.82	0.244	0.008	0.306
24	6																													122.18	2.86	0.240	0.008	0.314
25	9																													122.18	2.86	0.239	0.008	0.322
26	8																													122.23	2.91	0.233	0.008	0.330
27	9																													122.32	3.00	0.223	0.007	0.337
28	9																													122.32	3.00	0.223	0.007	0.344
29	8																													122.34	3.02	0.221	0.007	0.352
30	10																													122.35	3.03	0.220	0.007	0.359
31	8																													122.45	3.13	0.209	0.007	0.366
32	7																													122.47	3.15	0.207	0.007	0.373
33	9																													122.48	3.16	0.206	0.007	0.379
34	8																													122.51	3.19	0.203	0.007	0.386
35	8																													122.53	3.21	0.201	0.007	0.393
36	5																													122.55	3.24	0.198	0.007	0.399
37	7																													122.57	3.25	0.197	0.006	0.406
38	6																													122.62	3.30	0.192	0.006	0.412
39	10																													122.62	3.30	0.192	0.006	0.418
40	9																													122.70	3.38	0.184	0.006	0.424
41	9																													122.74	3.42	0.181	0.006	0.430
42	8																													122.77	3.45	0.178	0.006	0.436
43	9																													122.81	3.49	0.174	0.006	0.442

44	6											122.82	3.51	0.173	0.006	0.447
45	7											122.84	3.52	0.172	0.006	0.453
46	6											122.86	3.54	0.170	0.006	0.459
47	7											122.87	3.55	0.169	0.006	0.464
48	8											122.90	3.59	0.166	0.005	0.470
49	8											122.96	3.64	0.162	0.005	0.475
50	9											122.96	3.65	0.161	0.005	0.480
51	5											122.98	3.66	0.160	0.005	0.486
52	8											123.02	3.70	0.157	0.005	0.491
53	8											123.06	3.74	0.154	0.005	0.496
54	10											123.06	3.74	0.154	0.005	0.501
55	8											123.07	3.76	0.153	0.005	0.506
56	7											123.08	3.76	0.153	0.005	0.511
57	8											123.10	3.78	0.151	0.005	0.516
58	7											123.10	3.79	0.150	0.005	0.521
59	7											123.12	3.81	0.149	0.005	0.526
60	6											123.12	3.81	0.149	0.005	0.531
61	9											123.13	3.81	0.149	0.005	0.536
62	6											123.14	3.82	0.148	0.005	0.540
63	6											123.15	3.83	0.147	0.005	0.545
64	8											123.19	3.87	0.145	0.005	0.550
65	7											123.22	3.90	0.142	0.005	0.555
66	8											123.25	3.93	0.140	0.005	0.559
67	7											123.25	3.93	0.140	0.005	0.564
68	4											123.26	3.94	0.139	0.005	0.568
69	11											123.30	3.98	0.136	0.004	0.573
70	6											123.30	3.99	0.136	0.004	0.577
71	10											123.36	4.04	0.133	0.004	0.582
72	6											123.37	4.05	0.132	0.004	0.586
73	8											123.43	4.11	0.128	0.004	0.590
74	7											123.48	4.16	0.125	0.004	0.594

model average

β	0.06	0.04	0.00	0.01	0.01	0.01	0.03	0.09	0.00	0.13
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
relative										
importance	1.00	0.84	0.22	0.33	0.45	0.37	0.59	1.00	0.16	1.00
95% CI	0.05	0.06	0.02	0.03	0.04	0.04	0.06	0.05	0.01	0.04

Table S3.23. Crested Lark summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	10																													326.56	0.00	1.000	0.051	0.051	
2	12																														326.58	0.02	0.989	0.050	0.101
3	11																														326.85	0.29	0.865	0.044	0.145
4	11																														326.93	0.37	0.831	0.042	0.187
5	10																														327.44	0.89	0.641	0.033	0.220
6	11																														328.15	1.59	0.451	0.023	0.243
7	9																														328.22	1.67	0.434	0.022	0.265
8	10																														328.39	1.84	0.399	0.020	0.285
9	9																														328.63	2.07	0.355	0.018	0.303
10	10																														328.66	2.11	0.348	0.018	0.321
11	9																														329.16	2.60	0.272	0.014	0.335
12	8																														329.25	2.70	0.259	0.013	0.348
13	11																														329.33	2.77	0.250	0.013	0.361
14	8																														329.39	2.84	0.242	0.012	0.373
15	9																														329.47	2.92	0.233	0.012	0.385
16	10																														329.48	2.92	0.232	0.012	0.397
17	9																														329.57	3.01	0.222	0.011	0.408
18	8																														329.59	3.03	0.219	0.011	0.419
19	7																														329.59	3.04	0.219	0.011	0.430
20	11																														329.63	3.08	0.215	0.011	0.441
21	10																														329.66	3.10	0.212	0.011	0.452
22	8																														329.66	3.11	0.212	0.011	0.463
23	8																														329.73	3.17	0.205	0.010	0.473
24	8																														329.78	3.23	0.199	0.010	0.483
25	9																														329.80	3.25	0.197	0.010	0.493
26	11																														329.89	3.34	0.188	0.010	0.503
27	7																														329.89	3.34	0.188	0.010	0.512
28	10																														329.99	3.43	0.180	0.009	0.521
29	9																														330.08	3.52	0.172	0.009	0.530
30	9																														330.09	3.53	0.171	0.009	0.539
31	10																														330.20	3.65	0.161	0.008	0.547
32	9																														330.29	3.74	0.154	0.008	0.555
33	11																														330.35	3.79	0.150	0.008	0.563
34	7																														330.41	3.86	0.145	0.007	0.570
35	9																														330.49	3.94	0.140	0.007	0.577
36	7																														330.55	3.99	0.136	0.007	0.584
37	10																														330.70	4.15	0.126	0.006	0.590
38	10																														330.71	4.15	0.125	0.006	0.597
39	6																														330.71	4.16	0.125	0.006	0.603
40	9																														330.72	4.16	0.125	0.006	0.609

model average												
β	-0.41	0.18	-0.86	0.43	-0.39	0.47	-2.99	-0.81	-0.50	0.18	-2.59	
variance	0.07	0.07	0.20	0.11	0.13	0.14	1.19	0.20	0.08	0.04	0.30	
relative												
importance	0.84	0.41	0.92	0.75	0.68	0.75	1.00	0.91	0.92	0.58	1.00	
95% CI	0.51	0.48	0.85	0.63	0.69	0.73	2.14	0.83	0.54	0.40	1.07	

Table S3.24. Crested Lark summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	9																													112.52	0.00	1.000	0.342	0.342		
2	10																														114.12	1.59	0.451	0.154	0.496	
3	8																														115.32	2.80	0.246	0.084	0.580	
4	8																														115.63	3.10	0.212	0.072	0.652	
5	7																														116.56	4.03	0.133	0.045	0.698	
6	8																														116.69	4.16	0.125	0.043	0.740	
model average																																				
	β																																			
	variance																																			
	relative importance																																			
	95% CI																																			

Table S3.25. Crested Lark winter abundance

Land-cover buffer scale: 1 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	16																													282.60	0.00	1.000	0.064	0.064		
2	17																													282.62	0.02	0.991	0.063	0.127		
3	14																													283.00	0.40	0.818	0.052	0.180		
4	13																													283.27	0.67	0.717	0.046	0.225		
5	15																													283.33	0.72	0.696	0.044	0.270		
6	15																													283.71	1.11	0.575	0.037	0.307		
7	15																													283.88	1.28	0.528	0.034	0.340		
8	16																													283.95	1.34	0.511	0.033	0.373		
9	16																													284.32	1.72	0.424	0.027	0.400		
10	14																													284.40	1.80	0.407	0.026	0.426		
11	14																													284.66	2.06	0.357	0.023	0.449		
12	14																													285.08	2.48	0.290	0.019	0.467		
13	12																													285.25	2.65	0.266	0.017	0.484		
14	13																													285.29	2.69	0.261	0.017	0.501		
15	16																													285.30	2.69	0.260	0.017	0.518		
16	15																													285.64	3.04	0.219	0.014	0.532		
17	15																													285.73	3.12	0.210	0.013	0.545		
18	14																													285.85	3.25	0.197	0.013	0.558		
19	15																													285.87	3.27	0.195	0.012	0.570		
20	15																													285.99	3.38	0.184	0.012	0.582		
21	16																													286.22	3.62	0.164	0.010	0.592		
22	16																													286.31	3.71	0.157	0.010	0.602		
23	14																													286.39	3.79	0.150	0.010	0.612		
24	14																													286.40	3.80	0.150	0.010	0.622		
25	14																													286.45	3.85	0.146	0.009	0.631		
26	15																													286.46	3.86	0.145	0.009	0.640		
27	15																													286.52	3.91	0.141	0.009	0.649		
28	15																													286.69	4.09	0.129	0.008	0.657		
model average																																				
	β	1.97	0.41		0.83						-1.19	-0.20	-0.24	-1.03																						
	variance	0.38	0.08		0.03						0.09	0.08	0.15	0.09																						
	relative importance	1.00	0.83		1.00						1.00	0.47	0.46	1.00																						
	95% CI	1.21	0.52		0.32						0.59	0.53	0.70	0.60																						

Table S3.26. Crested Lark winter incidence

Land-cover buffer scale: 0.75 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	12																												125.54	0.00	1.000	0.052	0.052	
2	11																													126.12	0.58	0.749	0.039	0.091
3	10																													126.50	0.96	0.618	0.032	0.123
4	11																													127.01	1.47	0.480	0.025	0.148
5	10																													127.03	1.49	0.475	0.025	0.173
6	11																													127.04	1.50	0.472	0.025	0.197
7	11																													127.09	1.55	0.460	0.024	0.221
8	13																													127.24	1.70	0.427	0.022	0.243
9	9																													127.26	1.72	0.423	0.022	0.265
10	11																													127.42	1.88	0.391	0.020	0.286
11	9																													127.46	1.92	0.383	0.020	0.306
12	10																													127.51	1.97	0.373	0.019	0.325
13	10																													127.52	1.98	0.372	0.019	0.344
14	9																													127.83	2.29	0.319	0.017	0.361
15	12																													127.95	2.41	0.300	0.016	0.376
16	10																													128.00	2.46	0.293	0.015	0.392
17	10																													128.15	2.61	0.271	0.014	0.406
18	11																													128.34	2.80	0.247	0.013	0.419
19	12																													128.49	2.95	0.229	0.012	0.430
20	12																													128.53	2.99	0.225	0.012	0.442
21	9																													128.53	2.99	0.224	0.012	0.454
22	10																													128.60	3.06	0.216	0.011	0.465
23	10																													128.66	3.12	0.210	0.011	0.476
24	8																													128.68	3.14	0.208	0.011	0.487
25	11																													128.69	3.15	0.207	0.011	0.497
26	12																													128.75	3.21	0.201	0.010	0.508
27	9																													128.81	3.27	0.195	0.010	0.518
28	9																													128.84	3.30	0.192	0.010	0.528
29	11																													128.86	3.32	0.190	0.010	0.538
30	8																													128.92	3.38	0.184	0.010	0.547
31	8																													128.93	3.39	0.184	0.010	0.557
32	10																													128.93	3.39	0.184	0.010	0.567
33	10																													128.97	3.43	0.180	0.009	0.576
34	8																													129.01	3.47	0.176	0.009	0.585
35	9																													129.05	3.51	0.173	0.009	0.594
36	10																													129.07	3.53	0.171	0.009	0.603
37	11																													129.10	3.56	0.169	0.009	0.612
38	10																													129.10	3.56	0.169	0.009	0.621
39	10																													129.11	3.57	0.168	0.009	0.629
40	12																													129.18	3.64	0.162	0.008	0.638
41	9																													129.28	3.73	0.155	0.008	0.646
42	9																													129.35	3.81	0.149	0.008	0.653
43	11																													129.38	3.84	0.147	0.008	0.661

44	10														129.43	3.89	0.143	0.007	0.669
45	11														129.48	3.94	0.140	0.007	0.676
46	10														129.51	3.97	0.137	0.007	0.683
47	10														129.69	4.15	0.126	0.007	0.689
48	11														129.70	4.16	0.125	0.006	0.696

model average																			
β	0.14	0.04	0.08	-0.10	-0.03	-0.07	0.06	-0.04	0.03	0.02	0.00	0.17							
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
relative importance	1.00	0.78	1.00	1.00	0.62	0.98	0.92	0.76	0.70	0.44	0.23	1.00							
95% CI	0.07	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.02	0.04							

Table S3.27. Woodlark winter abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative	
																																		Akaike Weights	
1	6																													464.47	0.00	1.000	0.070	0.070	
2	7																													465.89	1.42	0.492	0.035	0.105	
3	7																													465.91	1.44	0.486	0.034	0.139	
4	5																													465.98	1.51	0.469	0.033	0.172	
5	7																													466.10	1.63	0.442	0.031	0.203	
6	7																													466.34	1.88	0.391	0.028	0.231	
7	8																													466.67	2.20	0.333	0.023	0.254	
8	8																													466.96	2.49	0.288	0.020	0.274	
9	9																													467.17	2.70	0.259	0.018	0.293	
10	6																													467.27	2.81	0.246	0.017	0.310	
11	8																													467.48	3.01	0.222	0.016	0.326	
12	6																													467.48	3.02	0.221	0.016	0.341	
13	8																													467.55	3.08	0.215	0.015	0.356	
14	8																													467.56	3.09	0.213	0.015	0.371	
15	6																													467.74	3.28	0.194	0.014	0.385	
16	8																													467.83	3.36	0.186	0.013	0.398	
17	6																													467.89	3.42	0.181	0.013	0.411	
18	7																													468.04	3.58	0.167	0.012	0.422	
19	10																													468.13	3.66	0.160	0.011	0.434	
20	7																													468.13	3.67	0.160	0.011	0.445	
21	5																													468.18	3.71	0.157	0.011	0.456	
22	6																													468.20	3.74	0.154	0.011	0.467	
23	9																													468.22	3.75	0.153	0.011	0.478	
24	7																													468.35	3.88	0.144	0.010	0.488	
25	9																													468.54	4.08	0.130	0.009	0.497	
26	6																													468.60	4.13	0.127	0.009	0.506	
27	7																													468.62	4.15	0.126	0.009	0.515	
28	6																													468.63	4.16	0.125	0.009	0.523	
model average																																			
β		-0.57			0.48				-1.52							0.51		-0.08										0.12	0.07	-0.30					
variance		0.17			0.08				0.49							0.07		0.05											0.06	0.03	0.08				
relative																																			
importance		0.80			0.88				1.00							0.94		0.26											0.35	0.31	1.00				
95% CI		0.79			0.54				1.37							0.52		0.32											0.41	0.26	0.56				

Table S3.28. Woodlark winter incidence





Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	5																												211.64	0.00	1.000	0.148	0.148		
2	6																												211.69	0.05	0.977	0.144	0.292		
3	6																												211.71	0.07	0.965	0.142	0.434		
4	7																												212.20	0.56	0.754	0.111	0.546		
5	5																												212.93	1.30	0.523	0.077	0.623		
6	6																												213.25	1.61	0.448	0.066	0.689		
7	5																												214.14	2.50	0.287	0.042	0.732		
8	5																												214.19	2.55	0.279	0.041	0.773		
9	4																												214.54	2.90	0.234	0.035	0.807		
10	4																												214.57	2.93	0.231	0.034	0.842		
11	5																												214.72	3.08	0.214	0.032	0.873		
12	6																												214.84	3.20	0.202	0.030	0.903		
13	5																												215.30	3.66	0.160	0.024	0.927		
14	4																												215.34	3.70	0.158	0.023	0.950		
model average																																			
	β	-0.02			0.05				-0.04							0.09													0.02	0.22					
	variance	0.00			0.00				0.00							0.00													0.00	0.00					
	relative importance	0.53			0.81				0.72							1.00													0.48	1.00					
	95% CI	0.06			0.07				0.07							0.06													0.05	0.06					

Table S3.29. Skylark winter incidence, intercorrelations model (b)

Land-cover buffer scale: 1.25 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	11																												87.01	0.00	1.000	0.058	0.058	
2	10																												87.66	0.64	0.725	0.042	0.099	
3	10																												87.92	0.91	0.635	0.037	0.136	
4	10																												88.07	1.06	0.589	0.034	0.170	
5	12																												88.26	1.24	0.537	0.031	0.201	
6	9																												88.26	1.25	0.536	0.031	0.232	
7	12																												88.37	1.36	0.507	0.029	0.261	
8	9																												88.60	1.59	0.451	0.026	0.287	
9	11																												88.81	1.79	0.408	0.024	0.311	
10	11																												88.82	1.81	0.405	0.023	0.334	
11	11																												88.89	1.88	0.391	0.023	0.357	
12	10																												88.90	1.89	0.389	0.022	0.379	
13	9																												88.91	1.90	0.387	0.022	0.401	
14	12																												89.00	1.98	0.371	0.021	0.423	
15	8																												89.14	2.13	0.345	0.020	0.443	
16	11																												89.25	2.24	0.326	0.019	0.461	
17	10																												89.36	2.34	0.310	0.018	0.479	
18	11																												89.38	2.37	0.306	0.018	0.497	
19	11																												89.45	2.43	0.296	0.017	0.514	
20	13																												89.48	2.47	0.291	0.017	0.531	
21	11																												89.65	2.63	0.268	0.015	0.546	
22	11																												89.80	2.79	0.248	0.014	0.561	
23	12																												89.82	2.80	0.246	0.014	0.575	
24	11																												89.85	2.84	0.242	0.014	0.589	
25	10																												89.87	2.86	0.239	0.014	0.603	
26	10																												89.89	2.87	0.238	0.014	0.616	
27	12																												89.90	2.88	0.237	0.014	0.630	
28	11																												89.92	2.90	0.234	0.013	0.643	
29	9																												89.94	2.92	0.232	0.013	0.657	
30	10																												90.06	3.04	0.218	0.013	0.669	
31	10																												90.09	3.08	0.215	0.012	0.682	
32	13																												90.24	3.23	0.199	0.011	0.693	
33	13																												90.36	3.34	0.188	0.011	0.704	
34	10																												90.38	3.37	0.185	0.011	0.715	
35	9																												90.55	3.54	0.171	0.010	0.725	
36	10																												90.60	3.59	0.166	0.010	0.734	
37	12																												90.70	3.69	0.158	0.009	0.743	
38	10																												90.75	3.74	0.154	0.009	0.752	
39	11																												90.76	3.75	0.154	0.009	0.761	
40	12																												90.80	3.78	0.151	0.009	0.770	
41	12																												90.81	3.80	0.149	0.009	0.778	
42	12																												90.82	3.80	0.149	0.009	0.787	
43	9																												91.03	4.01	0.134	0.008	0.795	

44 12      91.04 4.02 0.134 0.008 0.802

model average														
β	0.14	0.09	0.03	0.08	0.00	0.01	-0.10	-0.02	-0.02	0.07	-0.10	0.01	0.23	
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
relative importance	1.00	1.00	0.67	1.00	0.21	0.33	1.00	0.58	0.56	1.00	1.00	0.30	1.00	
95% CI	0.06	0.06	0.06	0.04	0.01	0.03	0.06	0.05	0.04	0.05	0.05	0.02	0.04	

Table S3.30. Skylark winter incidence, intercorrelations model (c)

Land-cover buffer scale: 1.25 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	13																												94.96	0.00	1.000	0.065	0.065			
2	14																													95.43	0.46	0.793	0.051	0.116		
3	12																													95.69	0.72	0.696	0.045	0.161		
4	13																													95.99	1.03	0.598	0.039	0.200		
5	14																													96.47	1.50	0.472	0.031	0.231		
6	14																													96.85	1.89	0.389	0.025	0.256		
7	15																													96.90	1.94	0.380	0.025	0.281		
8	13																													96.97	2.01	0.366	0.024	0.304		
9	15																													97.34	2.38	0.304	0.020	0.324		
10	12																													97.44	2.48	0.289	0.019	0.343		
11	14																													97.46	2.50	0.287	0.019	0.361		
12	12																													97.48	2.51	0.285	0.018	0.380		
13	13																													97.59	2.62	0.269	0.017	0.397		
14	12																													97.79	2.83	0.243	0.016	0.413		
15	14																													97.82	2.86	0.239	0.016	0.429		
16	15																													98.20	3.24	0.198	0.013	0.441		
17	13																													98.22	3.26	0.196	0.013	0.454		
18	11																													98.26	3.29	0.193	0.012	0.467		
19	13																													98.51	3.55	0.170	0.011	0.478		
20	13																													98.54	3.58	0.167	0.011	0.488		
21	11																													98.63	3.66	0.160	0.010	0.499		
22	14																													98.69	3.73	0.155	0.010	0.509		
23	16																													98.74	3.78	0.151	0.010	0.519		
24	11																													98.81	3.85	0.146	0.009	0.528		
25	12																													98.86	3.89	0.143	0.009	0.537		
26	11																													98.90	3.94	0.140	0.009	0.546		
27	11																													98.90	3.94	0.139	0.009	0.556		
28	13																													98.98	4.02	0.134	0.009	0.564		
29	12																													99.03	4.07	0.131	0.008	0.573		
30	12																													99.06	4.10	0.129	0.008	0.581		
31	10																													99.12	4.15	0.125	0.008	0.589		
model average																																				
	β			0.13	0.07			0.08	-0.04					0.00		0.00	-0.01		-0.09	-0.11		-0.05			-0.04	0.07	-0.12	0.02	0.23							
	variance			0.00	0.00			0.00	0.00					0.00		0.00	0.00		0.00	0.00		0.00			0.00	0.00	0.00	0.00	0.00							
	relative																																			
	importance			1.00	1.00			1.00	0.88					0.22		0.24	0.36		1.00	1.00		0.91			0.94	0.94	1.00	0.60	1.00							
	95% CI			0.05	0.05			0.04	0.05					0.02		0.02	0.04		0.05	0.06		0.06			0.05	0.07	0.06	0.05	0.04							

Table S3.31. Barn Swallow summer abundance, $\hat{\beta}$ as offset

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	8																													413.32	0.00	1.000	0.267	0.267	
2	7																													413.75	0.43	0.806	0.215	0.481	
3	6																													414.10	0.78	0.676	0.180	0.662	
4	7																													415.09	1.77	0.413	0.110	0.772	
5	7																													415.54	2.22	0.330	0.088	0.860	
6	6																													416.94	3.61	0.164	0.044	0.904	
model average																																			
β		0.30	0.73							1.14									0.18														0.40	-2.68	
variance		0.07	0.06							0.11									0.06														0.06	1.73	
relative importance		0.68	1.00							1.00									0.51														0.85	1.00	
95% CI		0.52	0.50							0.64									0.47														0.44	2.58	

Table S3.32. Barn Swallow summer incidence, \hat{p} as offset

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																												198.08	0.00	1.000	0.029	0.029	
2	8																												198.15	0.07	0.967	0.028	0.057	
3	10																												198.56	0.48	0.788	0.023	0.080	
4	8																												198.63	0.54	0.762	0.022	0.102	
5	7																												198.66	0.58	0.748	0.022	0.123	
6	7																												198.88	0.79	0.672	0.019	0.143	
7	9																												198.91	0.82	0.662	0.019	0.162	
8	7																												198.93	0.85	0.654	0.019	0.181	
9	7																												198.97	0.89	0.641	0.019	0.199	
10	8																												199.05	0.97	0.616	0.018	0.217	
11	6																												199.12	1.04	0.596	0.017	0.234	
12	8																												199.16	1.07	0.584	0.017	0.251	
13	8																												199.29	1.21	0.546	0.016	0.267	
14	9																												199.41	1.33	0.515	0.015	0.282	
15	6																												199.43	1.35	0.510	0.015	0.296	
16	9																												199.45	1.36	0.506	0.015	0.311	
17	7																												199.52	1.44	0.487	0.014	0.325	
18	6																												199.57	1.49	0.475	0.014	0.339	
19	7																												199.61	1.53	0.466	0.013	0.352	
20	6																												199.68	1.60	0.450	0.013	0.365	
21	10																												199.70	1.62	0.445	0.013	0.378	
22	7																												199.71	1.63	0.444	0.013	0.391	
23	8																												199.72	1.64	0.441	0.013	0.404	
24	8																												199.72	1.64	0.441	0.013	0.416	
25	6																												199.76	1.67	0.433	0.013	0.429	
26	9																												199.82	1.74	0.419	0.012	0.441	
27	5																												200.03	1.95	0.377	0.011	0.452	
28	9																												200.05	1.97	0.374	0.011	0.463	
29	8																												200.06	1.98	0.372	0.011	0.474	
30	8																												200.14	2.06	0.357	0.010	0.484	
31	9																												200.21	2.13	0.345	0.010	0.494	
32	10																												200.30	2.21	0.331	0.010	0.503	
33	8																												200.34	2.26	0.323	0.009	0.513	
34	7																												200.35	2.27	0.322	0.009	0.522	
35	11																												200.47	2.38	0.303	0.009	0.531	
36	8																												200.48	2.39	0.303	0.009	0.540	
37	9																												200.51	2.42	0.298	0.009	0.548	
38	8																												200.51	2.43	0.297	0.009	0.557	
39	7																												200.53	2.45	0.294	0.009	0.565	
40	7																												200.54	2.46	0.293	0.008	0.574	
41	8																												200.66	2.58	0.275	0.008	0.582	
42	8																												200.68	2.59	0.273	0.008	0.590	
43	7																												200.75	2.66	0.264	0.008	0.597	

44	8										200.81	2.73	0.256	0.007	0.605
45	9										200.83	2.75	0.253	0.007	0.612
46	7										200.85	2.77	0.250	0.007	0.619
47	9										200.88	2.79	0.247	0.007	0.626
48	8										200.89	2.80	0.246	0.007	0.633
49	6										200.91	2.82	0.244	0.007	0.640
50	7										200.94	2.86	0.240	0.007	0.647
51	9										200.94	2.86	0.240	0.007	0.654
52	7										201.04	2.95	0.228	0.007	0.661
53	7										201.09	3.00	0.223	0.006	0.667
54	9										201.09	3.01	0.222	0.006	0.674
55	9										201.17	3.08	0.214	0.006	0.680
56	5										201.23	3.14	0.208	0.006	0.686
57	8										201.25	3.16	0.206	0.006	0.692
58	10										201.27	3.19	0.203	0.006	0.698
59	5										201.32	3.23	0.199	0.006	0.703
60	7										201.34	3.25	0.197	0.006	0.709
61	7										201.39	3.31	0.191	0.006	0.715
62	7										201.40	3.31	0.191	0.006	0.720
63	7										201.40	3.32	0.190	0.005	0.726
64	8										201.41	3.32	0.190	0.005	0.731
65	6										201.42	3.34	0.189	0.005	0.737
66	7										201.46	3.37	0.185	0.005	0.742
67	9										201.55	3.46	0.177	0.005	0.747
68	8										201.55	3.46	0.177	0.005	0.752
69	8										201.64	3.56	0.169	0.005	0.757
70	8										201.65	3.57	0.168	0.005	0.762
71	7										201.68	3.60	0.166	0.005	0.767
72	8										201.70	3.62	0.164	0.005	0.771
73	10										201.80	3.72	0.156	0.004	0.776
74	8										201.84	3.75	0.153	0.004	0.780
75	9										201.84	3.76	0.153	0.004	0.785
76	6										201.85	3.77	0.152	0.004	0.789
77	8										201.94	3.86	0.145	0.004	0.793
78	7										201.96	3.87	0.144	0.004	0.797
79	6										201.98	3.90	0.142	0.004	0.802
80	6										202.01	3.93	0.140	0.004	0.806
81	10										202.11	4.02	0.134	0.004	0.809
82	5										202.11	4.03	0.133	0.004	0.813
83	8										202.14	4.05	0.132	0.004	0.817
84	6										202.17	4.09	0.130	0.004	0.821
85	7										202.23	4.14	0.126	0.004	0.825
86	8										202.23	4.15	0.126	0.004	0.828

model average															
β	0.05	0.01													
variance	0.00	0.00													
relative															
importance	0.82	0.28													
95% CI	0.07	0.04													

Table S3.33. Cyprus Wheatear summer abundance, intercorrelations model (b)

Land-cover buffer scale: 0.75 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	12	█		█				█							█				█	█	█	█	█			█	█	█	496.61	0.00	1.000	0.210	0.210		
2	11	█		█				█							█				█	█	█	█	█			█	█	█	497.73	1.11	0.573	0.120	0.330		
3	13		█	█															█	█	█	█	█			█	█	█	498.32	1.70	0.427	0.090	0.420		
4	12	█		█				█							█				█	█	█	█	█			█	█	█	498.73	2.12	0.347	0.073	0.493		
5	11		█	█															█	█	█	█	█			█	█	█	499.26	2.64	0.267	0.056	0.549		
6	11		█	█															█	█	█	█	█			█	█	█	499.40	2.79	0.248	0.052	0.601		
7	10		█	█															█	█	█	█	█			█	█	█	500.08	3.47	0.177	0.037	0.638		
8	11		█	█															█	█	█	█	█			█	█	█	500.56	3.95	0.139	0.029	0.667		
9	12	█		█				█							█				█	█	█	█	█			█	█	█	500.68	4.07	0.131	0.027	0.695		
model average																																			
	β	0.31	-0.11					0.32							0.50				0.42	0.50	0.35	0.17	0.54				0.83	0.03	-0.67						
	variance	0.01	0.01					0.01							0.02				0.02	0.02	0.04	0.02	0.03				0.04	0.00	0.02						
	relative importance	1.00	0.63					1.00							1.00				1.00	1.00	0.92	0.79	1.00				1.00	0.32	1.00						
	95% CI	0.21	0.22					0.19							0.26				0.29	0.29	0.37	0.24	0.32				0.40	0.11	0.29						

Table S3.34. Cyprus Wheatear summer abundance, intercorrelations model (d)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	12																												497.46	0.00	1.000	0.026	0.026	
2	11																												497.78	0.32	0.853	0.023	0.049	
3	10																												498.21	0.75	0.686	0.018	0.067	
4	11																												498.32	0.86	0.652	0.017	0.084	
5	9																												498.42	0.96	0.620	0.016	0.101	
6	10																												498.49	1.03	0.596	0.016	0.117	
7	9																												498.64	1.18	0.555	0.015	0.131	
8	11																												498.67	1.21	0.547	0.014	0.146	
9	11																												498.67	1.21	0.547	0.014	0.160	
10	8																												498.69	1.23	0.541	0.014	0.174	
11	9																												498.81	1.35	0.510	0.013	0.188	
12	12																												498.87	1.41	0.495	0.013	0.201	
13	9																												498.89	1.43	0.489	0.013	0.214	
14	8																												498.92	1.46	0.481	0.013	0.227	
15	11																												498.97	1.51	0.471	0.012	0.239	
16	9																												498.98	1.52	0.467	0.012	0.252	
17	10																												499.00	1.54	0.464	0.012	0.264	
18	10																												499.00	1.54	0.462	0.012	0.276	
19	9																												499.02	1.56	0.459	0.012	0.288	
20	8																												499.02	1.56	0.458	0.012	0.300	
21	10																												499.04	1.58	0.455	0.012	0.312	
22	9																												499.04	1.58	0.453	0.012	0.324	
23	10																												499.05	1.58	0.453	0.012	0.336	
24	9																												499.06	1.60	0.450	0.012	0.348	
25	10																												499.07	1.61	0.446	0.012	0.360	
26	13																												499.09	1.63	0.442	0.012	0.372	
27	8																												499.13	1.67	0.433	0.011	0.383	
28	10																												499.28	1.82	0.403	0.011	0.394	
29	10																												499.31	1.85	0.398	0.011	0.404	
30	8																												499.34	1.88	0.391	0.010	0.415	
31	12																												499.37	1.91	0.384	0.010	0.425	
32	9																												499.38	1.92	0.383	0.010	0.435	
33	10																												499.41	1.95	0.378	0.010	0.445	
34	9																												499.46	2.00	0.369	0.010	0.455	
35	10																												499.47	2.01	0.366	0.010	0.464	
36	10																												499.53	2.07	0.355	0.009	0.474	
37	10																												499.56	2.10	0.351	0.009	0.483	
38	11																												499.58	2.12	0.347	0.009	0.492	
39	11																												499.61	2.15	0.342	0.009	0.501	
40	11																												499.64	2.18	0.336	0.009	0.510	
41	7																												499.66	2.20	0.332	0.009	0.519	
42	10																												499.69	2.23	0.328	0.009	0.528	
43	11																												499.73	2.27	0.321	0.008	0.536	

44	9						499.76	2.30	0.317	0.008	0.544
45	9						499.80	2.34	0.310	0.008	0.553
46	8						499.87	2.41	0.300	0.008	0.561
47	11						499.89	2.43	0.297	0.008	0.568
48	10						499.98	2.52	0.284	0.008	0.576
49	11						500.01	2.55	0.280	0.007	0.583
50	12						500.05	2.59	0.274	0.007	0.591
51	7						500.07	2.61	0.271	0.007	0.598
52	10						500.08	2.62	0.270	0.007	0.605
53	10						500.10	2.64	0.267	0.007	0.612
54	11						500.17	2.70	0.259	0.007	0.619
55	12						500.18	2.72	0.257	0.007	0.626
56	8						500.18	2.72	0.256	0.007	0.632
57	11						500.27	2.81	0.245	0.006	0.639
58	9						500.29	2.83	0.243	0.006	0.645
59	10						500.34	2.88	0.236	0.006	0.651
60	10						500.35	2.89	0.236	0.006	0.658
61	10						500.35	2.89	0.235	0.006	0.664
62	10						500.39	2.93	0.231	0.006	0.670
63	9						500.39	2.93	0.231	0.006	0.676
64	9						500.42	2.96	0.227	0.006	0.682
65	9						500.43	2.97	0.226	0.006	0.688
66	9						500.48	3.02	0.221	0.006	0.694
67	10						500.51	3.05	0.218	0.006	0.700
68	9						500.59	3.13	0.210	0.006	0.705
69	8						500.63	3.17	0.205	0.005	0.711
70	9						500.72	3.26	0.196	0.005	0.716
71	10						500.73	3.27	0.195	0.005	0.721
72	11						500.73	3.27	0.195	0.005	0.726
73	11						500.76	3.30	0.192	0.005	0.731
74	11						500.80	3.34	0.189	0.005	0.736
75	11						500.93	3.47	0.176	0.005	0.741
76	10						500.95	3.49	0.174	0.005	0.746
77	11						501.05	3.59	0.166	0.004	0.750
78	10						501.12	3.66	0.160	0.004	0.754
79	9						501.17	3.71	0.157	0.004	0.758
80	11						501.21	3.75	0.154	0.004	0.762
81	11						501.21	3.75	0.153	0.004	0.766
82	12						501.23	3.77	0.152	0.004	0.770
83	9						501.24	3.78	0.151	0.004	0.774
84	12						501.35	3.89	0.143	0.004	0.778
85	8						501.36	3.90	0.142	0.004	0.782
86	10						501.37	3.91	0.142	0.004	0.786
87	8						501.43	3.97	0.137	0.004	0.789
88	9						501.50	4.04	0.133	0.004	0.793
89	10						501.57	4.11	0.128	0.003	0.796
90	10						501.62	4.16	0.125	0.003	0.800

model average														
β	0.26	-0.51	-0.08		0.07	0.10	0.16		0.64	0.10	0.21	0.56	0.05	-0.66
variance	0.01	0.04	0.01		0.01	0.02	0.02		0.04	0.01	0.03	0.08	0.01	0.02
relative														
importance	1.00	0.99	0.51		0.47	0.50	0.74		1.00	0.59	0.80	0.91	0.41	1.00
95% CI	0.18	0.40	0.20		0.20	0.26	0.26		0.38	0.23	0.30	0.54	0.16	0.30

Table S3.35. Cyprus Wheatear summer incidence, intercorrelations model (a)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	9																												204.33	0.00	1.000	0.096	0.096			
2	9																													204.87	0.54	0.762	0.074	0.170		
3	10																													204.97	0.65	0.724	0.070	0.240		
4	8																													205.03	0.70	0.703	0.068	0.308		
5	8																													205.68	1.35	0.510	0.049	0.357		
6	10																													205.70	1.38	0.503	0.048	0.405		
7	10																													206.18	1.86	0.395	0.038	0.443		
8	11																													206.26	1.93	0.381	0.037	0.480		
9	9																													206.34	2.02	0.365	0.035	0.515		
10	9																													206.47	2.14	0.343	0.033	0.549		
11	9																													206.73	2.40	0.301	0.029	0.578		
12	8																													206.75	2.42	0.298	0.029	0.606		
13	7																													206.99	2.66	0.264	0.025	0.632		
14	9																													207.24	2.91	0.233	0.023	0.654		
15	10																													207.29	2.96	0.228	0.022	0.676		
16	8																													207.67	3.34	0.188	0.018	0.694		
17	9																													207.71	3.38	0.185	0.018	0.712		
18	9																													207.72	3.40	0.183	0.018	0.730		
19	10																													207.73	3.40	0.183	0.018	0.747		
20	8																													207.93	3.60	0.165	0.016	0.763		
21	9																													208.07	3.74	0.154	0.015	0.778		
22	8																													208.10	3.77	0.152	0.015	0.793		
23	8																													208.46	4.13	0.127	0.012	0.805		
model average																																				
β		0.03	-0.11					-0.08							0.11						0.07	0.03		0.12			0.02	0.02	0.45							
variance		0.00	0.00					0.00							0.00						0.00	0.00		0.00			0.00	0.00	0.00							
relative																																				
importance		0.66	1.00					1.00							1.00						0.85	0.56		1.00			0.45	0.49	1.00							
95% CI		0.07	0.07					0.06							0.07						0.09	0.08		0.08			0.07	0.06	0.05							

Table S3.36. Cyprus Wheatear summer incidence, intercorrelations model (b)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	11																												210.13	0.00	1.000	0.053	0.053			
2	10																												210.16	0.02	0.988	0.053	0.106			
3	12																												210.26	0.13	0.937	0.050	0.156			
4	11																												210.36	0.22	0.894	0.048	0.204			
5	10																												210.90	0.77	0.680	0.036	0.240			
6	11																												211.15	1.02	0.602	0.032	0.273			
7	11																												211.18	1.05	0.591	0.032	0.304			
8	10																												211.33	1.20	0.550	0.029	0.334			
9	11																												211.37	1.24	0.538	0.029	0.362			
10	10																												211.55	1.42	0.491	0.026	0.389			
11	9																												211.56	1.43	0.489	0.026	0.415			
12	9																												211.62	1.49	0.474	0.025	0.440			
13	10																												211.63	1.50	0.473	0.025	0.465			
14	10																												211.79	1.66	0.437	0.023	0.489			
15	10																												211.90	1.76	0.414	0.022	0.511			
16	9																												211.90	1.77	0.413	0.022	0.533			
17	10																												211.91	1.78	0.410	0.022	0.555			
18	9																												212.15	2.02	0.364	0.019	0.574			
19	10																												212.20	2.06	0.356	0.019	0.593			
20	9																												212.30	2.17	0.338	0.018	0.611			
21	9																												212.41	2.28	0.320	0.017	0.628			
22	11																												212.43	2.30	0.317	0.017	0.645			
23	10																												212.47	2.34	0.310	0.017	0.662			
24	10																												212.49	2.36	0.308	0.016	0.678			
25	10																												212.74	2.61	0.271	0.015	0.693			
26	9																												212.75	2.62	0.270	0.014	0.707			
27	8																												213.17	3.04	0.219	0.012	0.719			
28	9																												213.25	3.12	0.211	0.011	0.730			
29	8																												213.30	3.16	0.206	0.011	0.741			
30	9																												213.35	3.22	0.200	0.011	0.752			
31	9																												213.39	3.25	0.196	0.010	0.762			
32	8																												213.52	3.39	0.184	0.010	0.772			
33	8																												213.96	3.83	0.147	0.008	0.780			
model average																																				
	β	0.05									0.18								0.10	0.12	0.06	0.05		0.14	0.02		0.06	0.03	0.45							
	variance	0.00									0.00								0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00							
	relative importance	0.82									1.00								1.00	1.00	0.71	0.69		1.00	0.49		0.79	0.57	1.00							
	95% CI	0.07									0.07								0.07	0.08	0.11	0.09		0.10	0.05		0.09	0.07	0.06							

Table S3.37. Cyprus Wheatear summer incidence, intercorrelations model (c)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	8																												211.65	0.00	1.000	0.164	0.164				
2	7																												212.39	0.74	0.690	0.113	0.277				
3	9																												212.68	1.03	0.596	0.098	0.374				
4	9																												212.99	1.34	0.512	0.084	0.458				
5	8																												213.28	1.63	0.442	0.072	0.530				
6	8																												213.59	1.95	0.378	0.062	0.592				
7	10																												213.64	1.99	0.370	0.061	0.653				
8	9																												214.02	2.37	0.306	0.050	0.703				
9	7																												214.70	3.05	0.218	0.036	0.738				
10	8																												215.38	3.74	0.154	0.025	0.764				
11	7																												215.44	3.79	0.150	0.025	0.788				
12	8																												215.62	3.97	0.138	0.023	0.811				
13	9																												215.76	4.11	0.128	0.021	0.832				
model average																																					
β		0.01	-0.18						-0.11																												
variance		0.00	0.00						0.00																												
relative importance		0.38	1.00						1.00																												
95% CI		0.04	0.08						0.06																												

Table S3.38. Cyprus Wheatear summer incidence, intercorrelations model (d)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	11																												204.71	0.00	1.000	0.054	0.054	
2	10																													205.05	0.34	0.842	0.046	0.100
3	11																													205.15	0.44	0.803	0.043	0.143
4	12																													205.22	0.51	0.775	0.042	0.185
5	10																													205.72	1.01	0.605	0.033	0.218
6	9																													205.84	1.13	0.567	0.031	0.249
7	10																													205.98	1.27	0.529	0.029	0.277
8	11																													206.09	1.38	0.501	0.027	0.304
9	10																													206.10	1.39	0.500	0.027	0.331
10	9																													206.15	1.44	0.487	0.026	0.358
11	10																													206.17	1.46	0.481	0.026	0.384
12	11																													206.25	1.54	0.463	0.025	0.409
13	10																													206.33	1.62	0.444	0.024	0.433
14	10																													206.36	1.65	0.439	0.024	0.457
15	9																													206.41	1.70	0.428	0.023	0.480
16	10																													206.48	1.77	0.413	0.022	0.502
17	11																													206.52	1.81	0.405	0.022	0.524
18	11																													206.71	2.00	0.367	0.020	0.544
19	10																													207.07	2.36	0.307	0.017	0.561
20	9																													207.11	2.40	0.301	0.016	0.577
21	9																													207.16	2.45	0.293	0.016	0.593
22	10																													207.16	2.45	0.293	0.016	0.609
23	9																													207.17	2.46	0.292	0.016	0.624
24	10																													207.70	3.00	0.224	0.012	0.636
25	8																													207.92	3.21	0.201	0.011	0.647
26	9																													208.03	3.32	0.190	0.010	0.658
27	8																													208.10	3.39	0.184	0.010	0.668
28	8																													208.26	3.55	0.169	0.009	0.677
29	10																													208.37	3.66	0.160	0.009	0.685
30	9																													208.40	3.69	0.158	0.009	0.694
31	9																													208.42	3.72	0.156	0.008	0.702
32	10																													208.44	3.73	0.155	0.008	0.711
33	9																													208.45	3.74	0.154	0.008	0.719
34	9																													208.49	3.78	0.151	0.008	0.727
35	9																													208.54	3.83	0.147	0.008	0.735
36	8																													208.64	3.93	0.140	0.008	0.743
37	9																													208.71	4.00	0.135	0.007	0.750
38	10																													208.85	4.14	0.126	0.007	0.757

model average												
β	0.04	0.18	0.08	0.08	0.06	0.05	0.15	0.02	0.04	0.04	0.45	
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
relative												
importance	0.72	1.00	1.00	0.98	0.75	0.76	1.00	0.47	0.62	0.72	1.00	
95% CI	0.07	0.07	0.07	0.07	0.10	0.08	0.08	0.05	0.08	0.08	0.05	

Table S3.39. Zitting Cisticola summer abundance, \hat{p} as offset

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																													267.98	0.00	1.000	0.230	0.230
2	10																													269.94	1.96	0.375	0.086	0.317
3	8																													270.11	2.13	0.345	0.079	0.396
4	8																													270.36	2.38	0.303	0.070	0.466
5	8																													270.54	2.57	0.277	0.064	0.530
6	8																													271.53	3.55	0.170	0.039	0.569
7	7																													271.82	3.84	0.147	0.034	0.603
8	9																													271.95	3.97	0.137	0.032	0.634
model average																																		
	β					0.42						0.42							0.27	-0.67		-0.92		-0.61		0.27		-1.99						
	variance					0.07						0.02							0.03	0.08		0.19		0.16		0.05		0.08						
	relative importance					0.88						1.00							0.86	1.00		1.00		0.86		0.78		1.00						
	95% CI					0.49						0.25							0.33	0.55		0.86		0.77		0.41		0.57						

Table S3.40. Zitting Cisticola summer incidence, \hat{p} as offset

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	7																												182.16	0.00	1.000	0.227	0.227				
2	8																												183.11	0.94	0.623	0.142	0.369				
3	6																												183.90	1.74	0.419	0.095	0.464				
4	6																												184.45	2.28	0.319	0.073	0.536				
5	7																												184.47	2.31	0.316	0.072	0.608				
6	7																												184.69	2.53	0.282	0.064	0.672				
7	6																												185.89	3.73	0.155	0.035	0.707				
8	7																												185.93	3.77	0.152	0.035	0.742				
9	5																												186.10	3.93	0.140	0.032	0.774				
10	6																												186.20	4.04	0.133	0.030	0.804				
model average																																					
	β	-0.07				0.01																															
	variance	0.00				0.00																															
	relative importance	0.96				0.43																															
	95% CI	0.07				0.05																															

Table S3.41. Zitting Cisticola winter abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	10																												297.13	0.00	1.000	0.121	0.121			
2	11				■									■															297.29	0.16	0.921	0.111	0.232			
3	10				■																								297.72	0.59	0.745	0.090	0.322			
4	9				■																								297.84	0.71	0.700	0.085	0.407			
5	10				■																								297.87	0.74	0.690	0.083	0.491			
6	9				■																								297.91	0.78	0.677	0.082	0.573			
7	9				■																								298.03	0.90	0.639	0.077	0.650			
8	8				■																								298.40	1.27	0.530	0.064	0.714			
9	9				■																								300.06	2.93	0.231	0.028	0.742			
10	10				■																								300.79	3.66	0.160	0.019	0.761			
11	8				■																								300.82	3.69	0.158	0.019	0.780			
12	8				■																								301.08	3.95	0.139	0.017	0.797			
model average																																				
	β				-0.15									0.56	0.48		-0.45																			
	variance				0.03									0.04	0.03		0.07																			
	relative importance				0.58									1.00	1.00		0.90																			
	95% CI				0.34									0.37	0.33		0.50																			

Table S3.42. Zitting Cisticola winter incidence, intercorrelations model (b)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	10																													182.54	0.00	1.000	0.336	0.336			
2	9																													183.59	1.05	0.592	0.199	0.535			
3	11																													183.97	1.43	0.489	0.164	0.699			
4	10																													184.79	2.24	0.325	0.109	0.808			
model average																																					
	β				-0.08																																
	variance				0.00																																
	relative importance				1.00																																
	95% CI				0.06																																

Table S3.43. Zitting *Cisticola* winter incidence, intercorrelations model (d)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	11																													182.47	0.00	1.000	0.141	0.141		
2	10																													182.54	0.07	0.967	0.136	0.277		
3	9																													183.59	1.11	0.573	0.081	0.357		
4	10																													183.78	1.31	0.520	0.073	0.431		
5	11																													183.97	1.50	0.473	0.067	0.497		
6	10																													183.99	1.52	0.468	0.066	0.563		
7	12																													184.07	1.60	0.450	0.063	0.626		
8	9																													184.62	2.15	0.342	0.048	0.674		
9	10																													184.79	2.31	0.315	0.044	0.719		
10	11																													185.03	2.56	0.279	0.039	0.758		
11	11																													185.35	2.88	0.237	0.033	0.791		
12	10																													185.64	3.16	0.206	0.029	0.820		
model average																																				
	β				-0.09							-0.03		0.09	0.10		-0.14																			
	variance				0.00							0.00		0.00	0.00		0.00																			
	relative importance				1.00							0.63		1.00	1.00		1.00																			
	95% CI				0.06							0.07		0.07	0.06		0.08																			

Table S3.44. Eastern Olivaceous Warbler summer abundance, \hat{p} as offset

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	13																													480.59	0.00	1.000	0.079	0.079		
2	12																														481.11	0.51	0.774	0.061	0.140	
3	12																														481.77	1.18	0.556	0.044	0.184	
4	11																														481.98	1.38	0.501	0.039	0.223	
5	12																														482.06	1.46	0.481	0.038	0.261	
6	11																														482.39	1.79	0.408	0.032	0.293	
7	10																														482.46	1.87	0.393	0.031	0.324	
8	11																														482.48	1.89	0.389	0.031	0.355	
9	12																														482.62	2.03	0.363	0.029	0.384	
10	11																														482.66	2.06	0.357	0.028	0.412	
11	12																														482.80	2.21	0.331	0.026	0.438	
12	11																														482.81	2.22	0.330	0.026	0.464	
13	12																														482.87	2.27	0.321	0.025	0.489	
14	12																														482.97	2.38	0.304	0.024	0.513	
15	11																														483.06	2.46	0.292	0.023	0.536	
16	11																														483.26	2.67	0.263	0.021	0.557	
17	11																														483.37	2.77	0.250	0.020	0.577	
18	10																														483.67	3.08	0.214	0.017	0.594	
19	11																														484.08	3.49	0.175	0.014	0.608	
20	10																														484.13	3.54	0.170	0.013	0.621	
21	10																														484.20	3.61	0.164	0.013	0.634	
22	11																														484.23	3.63	0.163	0.013	0.647	
23	10																														484.35	3.75	0.153	0.012	0.659	
24	11																														484.49	3.90	0.142	0.011	0.670	
25	10																														484.61	4.01	0.134	0.011	0.681	
model average																																				
β		0.10	-0.17	0.22				0.14	0.19	0.34	0.36							0.40							0.47	0.29	0.49	-0.66								
variance		0.01	0.02	0.02				0.01	0.02	0.01	0.02							0.07							0.02	0.04	0.01	0.02								
relative																																				
importance		0.57	0.77	0.85				0.80	0.76	1.00	1.00							0.88							1.00	0.82	1.00	1.00								
95% CI		0.21	0.27	0.27				0.20	0.30	0.19	0.25							0.50							0.26	0.40	0.18	0.28								

Table S3.45. Eastern Olivaceous Warbler summer incidence, \hat{p} as offset

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																													203.53	0.00	1.000	0.280	0.280
2	8																													204.05	0.53	0.768	0.215	0.495
3	7																													205.14	1.61	0.446	0.125	0.620
4	8																													205.72	2.20	0.333	0.093	0.714
5	8																													205.89	2.36	0.307	0.086	0.799
6	7																													206.68	3.15	0.207	0.058	0.857
7	6																													207.64	4.12	0.128	0.036	0.893
model average																																		
	β											0.10	0.05	0.12						0.03				0.08	0.04	0.19	0.40							
	variance											0.00	0.00	0.00						0.00				0.00	0.00	0.00	0.00							
	relative importance											1.00	0.80	1.00						0.51				1.00	0.72	1.00	1.00							
	95% CI											0.06	0.07	0.06						0.07				0.06	0.07	0.06	0.05							

Table S3.46. Spectacled Warbler winter incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	8																												23.27	0.00	1.000	0.074	0.074			
2	7																													23.81	0.54	0.762	0.057	0.131		
3	9																													23.83	0.56	0.755	0.056	0.187		
4	10																													23.91	0.64	0.726	0.054	0.241		
5	9																													23.92	0.66	0.720	0.054	0.295		
6	8																													24.66	1.39	0.498	0.037	0.332		
7	8																													24.67	1.40	0.497	0.037	0.369		
8	9																													25.06	1.79	0.409	0.030	0.399		
9	9																													25.25	1.98	0.371	0.028	0.427		
10	8																													25.31	2.05	0.359	0.027	0.454		
11	7																													25.31	2.05	0.359	0.027	0.481		
12	8																													25.47	2.20	0.333	0.025	0.505		
13	7																													25.76	2.50	0.287	0.021	0.527		
14	8																													25.78	2.51	0.285	0.021	0.548		
15	8																													25.86	2.59	0.274	0.020	0.568		
16	9																													25.94	2.68	0.262	0.020	0.588		
17	7																													26.07	2.80	0.246	0.018	0.606		
18	9																													26.13	2.86	0.239	0.018	0.624		
19	6																													26.32	3.05	0.218	0.016	0.640		
20	8																													26.51	3.24	0.198	0.015	0.655		
21	7																													26.80	3.54	0.171	0.013	0.668		
22	6																													26.91	3.64	0.162	0.012	0.680		
23	8																													26.93	3.67	0.160	0.012	0.692		
24	7																													27.00	3.73	0.155	0.012	0.703		
25	8																													27.12	3.85	0.146	0.011	0.714		
26	7																													27.25	3.99	0.136	0.010	0.724		
model average																																				
β			0.02	0.01							-0.04	-0.06							-0.01	0.05	-0.04						0.03	0.08								
variance			0.00	0.00							0.00	0.00							0.00	0.00	0.00						0.00	0.00								
relative																																				
importance			0.65	0.44							0.88	1.00							0.50	0.98	0.90						0.79	1.00								
95% CI			0.05	0.03							0.04	0.04							0.04	0.05	0.04						0.04	0.03								

Table S3.47. Sardinian Warbler summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	10																												643.46	0.00	1.000	0.151	0.151	
2	11				█	█						█	█			█				█			█		█		█		643.57	0.12	0.944	0.142	0.293	
3	10				█	█																	█					643.86	0.40	0.817	0.123	0.416		
4	8				█	█																	█					644.40	0.94	0.625	0.094	0.510		
5	9				█	█																						644.41	0.95	0.622	0.094	0.603		
6	9				█	█						█	█															644.47	1.02	0.602	0.091	0.694		
7	9				█	█																	█					644.47	1.02	0.602	0.091	0.785		
8	10				█	█																	█		█			645.06	1.61	0.448	0.067	0.852		
9	9				█	█						█	█															647.62	4.17	0.125	0.019	0.871		
model average																																		
	β				-0.07	0.29						0.08	0.24			0.47				0.46			0.08		-0.50		1.20	0.05						
	variance				0.01	0.01						0.01	0.01			0.01				0.01			0.01		0.07		0.01	0.01						
	relative importance											0.60	1.00			1.00				1.00			0.49		0.98		1.00	1.00						
	95% CI				0.18	0.19						0.18	0.15			0.17				0.16			0.21		0.51		0.14	0.22						

Table S3.48. Sardinian Warbler summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																												142.99	0.00	1.000	0.055	0.055	
2	10					■																							143.06	0.07	0.966	0.053	0.109	
3	8																												143.34	0.35	0.839	0.046	0.155	
4	9					■																							143.34	0.36	0.837	0.046	0.201	
5	11					■																							143.52	0.53	0.767	0.042	0.244	
6	9					■																							144.08	1.09	0.579	0.032	0.276	
7	8																												144.14	1.15	0.561	0.031	0.307	
8	7																												144.20	1.21	0.547	0.030	0.337	
9	10																												144.50	1.51	0.470	0.026	0.363	
10	9					■																							144.93	1.94	0.379	0.021	0.384	
11	8																												144.93	1.94	0.378	0.021	0.405	
12	10					■																							145.01	2.03	0.363	0.020	0.425	
13	10																												145.02	2.03	0.362	0.020	0.445	
14	8																												145.07	2.08	0.354	0.020	0.465	
15	8																												145.12	2.13	0.345	0.019	0.484	
16	10																												145.16	2.18	0.337	0.019	0.503	
17	7					■																							145.23	2.24	0.326	0.018	0.521	
18	6																												145.24	2.25	0.325	0.018	0.539	
19	7																												145.27	2.28	0.319	0.018	0.556	
20	9																												145.33	2.34	0.310	0.017	0.573	
21	8					■																							145.43	2.44	0.295	0.016	0.590	
22	8																												145.90	2.91	0.233	0.013	0.603	
23	9																												145.90	2.92	0.233	0.013	0.616	
24	8					■																							145.95	2.96	0.228	0.013	0.628	
25	9					■																							146.04	3.05	0.218	0.012	0.640	
26	8																												146.09	3.10	0.212	0.012	0.652	
27	7																												146.26	3.27	0.195	0.011	0.663	
28	8					■																							146.48	3.49	0.174	0.010	0.672	
29	7																												146.52	3.53	0.171	0.009	0.682	
30	9																												146.61	3.62	0.164	0.009	0.691	
31	8																												146.65	3.66	0.160	0.009	0.700	
32	8																												146.69	3.70	0.157	0.009	0.709	
33	9																												146.69	3.70	0.157	0.009	0.717	
34	6																												146.74	3.75	0.154	0.008	0.726	
35	9																												146.77	3.78	0.151	0.008	0.734	
36	9					■																							147.04	4.05	0.132	0.007	0.741	
37	9																												147.05	4.06	0.132	0.007	0.749	
38	7																												147.08	4.09	0.129	0.007	0.756	
39	6																												147.14	4.15	0.126	0.007	0.763	
40	7																												147.14	4.15	0.125	0.007	0.770	

model average											
β	0.02	0.03	-0.01	0.04	0.07	-0.06	-0.04	0.06	0.35	0.47	
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
relative											
importance	0.55	0.59	0.29	0.73	1.00	0.88	0.83	0.74	1.00	1.00	
95% CI	0.05	0.06	0.03	0.07	0.05	0.07	0.06	0.09	0.05	0.05	

Table S3.49. Sardinian Warbler winter abundance

Land-cover buffer scale: 0.5 km

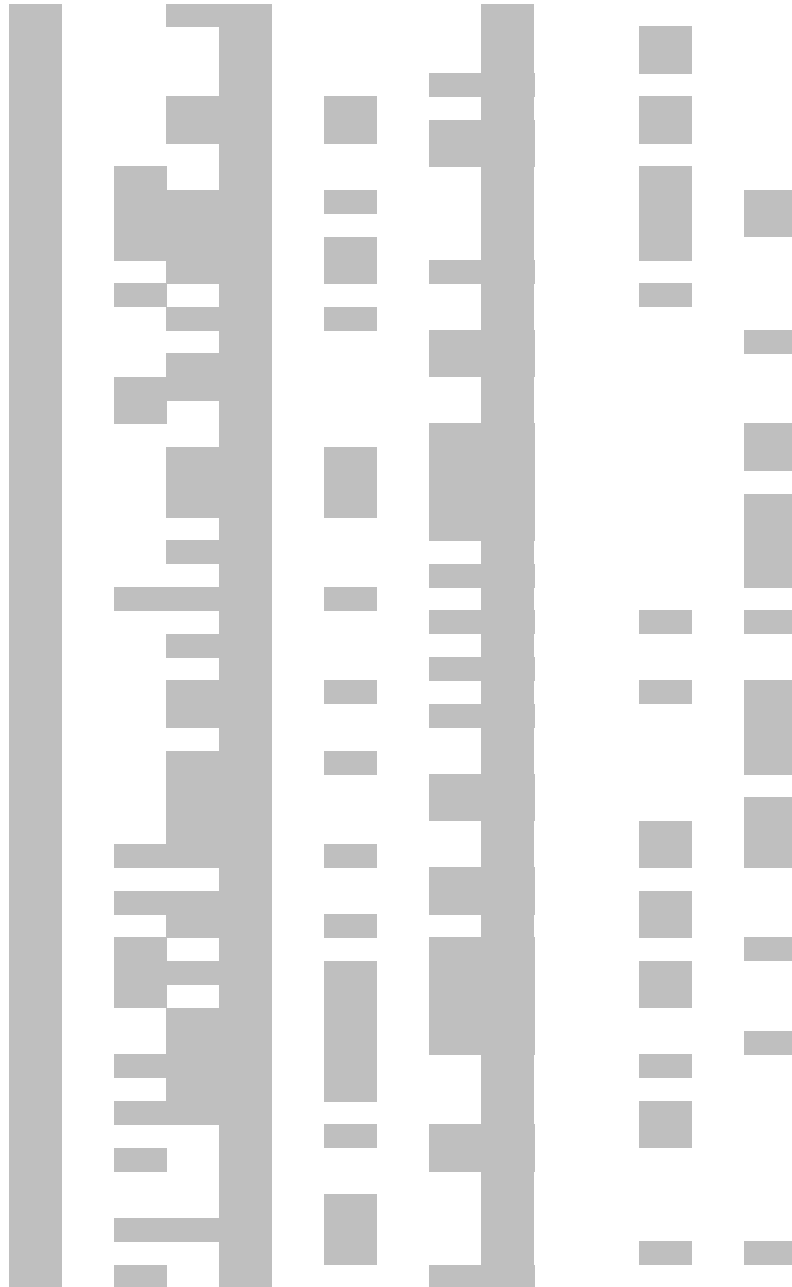
model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	8																													750.88	0.00	1.000	0.630	0.630
2	7																													752.44	1.56	0.459	0.289	0.919
model average																																		
	β									0.44						0.28	-0.27				0.13	-0.50						1.01	0.47					
	variance									0.01						0.01	0.01				0.01	0.02						0.01	0.01					
	relative importance									1.00						1.00	1.00				0.69	1.00						1.00	1.00					
	95% CI									0.21						0.16	0.20				0.23	0.28						0.16	0.19					

Table S3.50. Sardinian Warbler winter incidence

Land-cover buffer scale: 1.25 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	7																												179.38	0.00	1.000	0.013	0.013	
2	8																													179.65	0.27	0.874	0.011	0.024
3	8			■																										179.73	0.35	0.838	0.011	0.034
4	9			■													■													179.83	0.46	0.796	0.010	0.044
5	9			■													■													179.84	0.47	0.792	0.010	0.054
6	8			■																										180.10	0.73	0.696	0.009	0.063
7	9			■																										180.41	1.04	0.595	0.008	0.071
8	10			■																										180.44	1.06	0.589	0.007	0.078
9	8			■																										180.48	1.10	0.577	0.007	0.085
10	11			■																										180.68	1.30	0.521	0.007	0.092
11	10			■																										180.69	1.31	0.519	0.007	0.099
12	10			■																										180.77	1.39	0.498	0.006	0.105
13	8			■																					■					180.77	1.39	0.498	0.006	0.111
14	9			■																										180.78	1.40	0.496	0.006	0.118
15	8			■																										180.91	1.53	0.465	0.006	0.123
16	9			■																										180.92	1.54	0.462	0.006	0.129
17	7			■																										180.95	1.58	0.455	0.006	0.135
18	9			■																					■					180.98	1.61	0.448	0.006	0.141
19	6			■																					■					180.99	1.62	0.445	0.006	0.146
20	8			■																										181.03	1.65	0.438	0.006	0.152
21	10			■																										181.07	1.69	0.429	0.005	0.157
22	10			■																					■					181.14	1.76	0.414	0.005	0.163
23	8	■		■																										181.21	1.83	0.400	0.005	0.168
24	9	■	■	■																										181.24	1.87	0.393	0.005	0.173
25	9			■																										181.27	1.89	0.389	0.005	0.178
26	9			■																										181.27	1.89	0.388	0.005	0.182
27	8		■	■																					■					181.30	1.93	0.381	0.005	0.187
28	9	■	■	■																										181.33	1.95	0.377	0.005	0.192
29	10			■																					■					181.47	2.10	0.350	0.004	0.196
30	9			■																										181.50	2.12	0.346	0.004	0.201
31	9			■																										181.50	2.13	0.346	0.004	0.205
32	10			■																										181.54	2.17	0.339	0.004	0.209
33	10	■		■																										181.54	2.17	0.338	0.004	0.214
34	9			■																										181.56	2.18	0.336	0.004	0.218
35	9			■																					■					181.58	2.20	0.333	0.004	0.222
36	8		■	■																										181.59	2.21	0.331	0.004	0.226
37	9			■																						■				181.59	2.21	0.330	0.004	0.231
38	9	■		■																										181.60	2.22	0.329	0.004	0.235
39	10	■		■																										181.61	2.23	0.327	0.004	0.239
40	9	■		■																										181.61	2.24	0.327	0.004	0.243
41	10			■																										181.63	2.25	0.325	0.004	0.247
42	10	■		■																										181.66	2.28	0.319	0.004	0.251
43	9			■																										181.68	2.30	0.317	0.004	0.255

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181.68	2.30	0.316	0.004	0.259
181.68	2.31	0.316	0.004	0.263
181.69	2.31	0.315	0.004	0.267
181.70	2.32	0.313	0.004	0.271
181.76	2.38	0.304	0.004	0.275
181.76	2.38	0.304	0.004	0.279
181.78	2.40	0.301	0.004	0.283
181.80	2.42	0.298	0.004	0.286
181.81	2.44	0.296	0.004	0.290
181.82	2.44	0.296	0.004	0.294
181.82	2.44	0.295	0.004	0.298
181.84	2.46	0.292	0.004	0.301
181.84	2.46	0.292	0.004	0.305
181.88	2.51	0.286	0.004	0.309
181.90	2.52	0.284	0.004	0.312
181.92	2.54	0.281	0.004	0.316
181.94	2.56	0.277	0.004	0.319
181.95	2.57	0.276	0.003	0.323
181.96	2.58	0.275	0.003	0.326
181.97	2.59	0.274	0.003	0.330
182.05	2.67	0.263	0.003	0.333
182.06	2.68	0.262	0.003	0.336
182.06	2.68	0.261	0.003	0.340
182.08	2.70	0.259	0.003	0.343
182.09	2.71	0.257	0.003	0.346
182.10	2.72	0.256	0.003	0.349
182.10	2.72	0.256	0.003	0.353
182.11	2.74	0.255	0.003	0.356
182.13	2.76	0.252	0.003	0.359
182.14	2.77	0.251	0.003	0.362
182.17	2.80	0.247	0.003	0.365
182.18	2.81	0.246	0.003	0.369
182.19	2.81	0.245	0.003	0.372
182.22	2.85	0.241	0.003	0.375
182.24	2.86	0.239	0.003	0.378
182.24	2.87	0.238	0.003	0.381
182.25	2.87	0.238	0.003	0.384
182.25	2.87	0.238	0.003	0.387
182.28	2.91	0.234	0.003	0.390
182.29	2.91	0.234	0.003	0.393
182.29	2.92	0.233	0.003	0.396
182.30	2.92	0.232	0.003	0.399
182.30	2.92	0.232	0.003	0.401
182.31	2.93	0.231	0.003	0.404
182.32	2.94	0.230	0.003	0.407
182.35	2.97	0.226	0.003	0.410
182.40	3.02	0.221	0.003	0.413
182.40	3.03	0.220	0.003	0.416
182.41	3.03	0.220	0.003	0.419
182.41	3.03	0.220	0.003	0.421
182.41	3.03	0.219	0.003	0.424
182.42	3.04	0.219	0.003	0.427
182.42	3.04	0.218	0.003	0.430
182.42	3.04	0.218	0.003	0.432
182.43	3.05	0.217	0.003	0.435

99	11							182.43	3.05	0.217	0.003	0.438
100	13							182.43	3.06	0.217	0.003	0.441
101	11							182.44	3.06	0.217	0.003	0.443
102	10							182.45	3.07	0.216	0.003	0.446
103	10							182.45	3.07	0.215	0.003	0.449
104	10							182.46	3.08	0.214	0.003	0.452
105	8							182.46	3.09	0.214	0.003	0.454
106	9							182.48	3.10	0.212	0.003	0.457
107	7							182.48	3.10	0.212	0.003	0.460
108	10							182.48	3.11	0.211	0.003	0.462
109	10							182.49	3.12	0.211	0.003	0.465
110	10							182.54	3.17	0.205	0.003	0.468
111	10							182.55	3.17	0.204	0.003	0.470
112	12							182.56	3.18	0.204	0.003	0.473
113	9							182.56	3.18	0.204	0.003	0.475
114	12							182.56	3.19	0.203	0.003	0.478
115	8							182.56	3.19	0.203	0.003	0.480
116	10							182.57	3.19	0.203	0.003	0.483
117	9							182.57	3.20	0.202	0.003	0.486
118	11							182.58	3.20	0.202	0.003	0.488
119	11							182.59	3.21	0.201	0.003	0.491
120	12							182.59	3.21	0.201	0.003	0.493
121	10							182.59	3.22	0.200	0.003	0.496
122	11							182.60	3.23	0.199	0.003	0.498
123	11							182.62	3.24	0.198	0.003	0.501
124	11							182.63	3.25	0.197	0.002	0.503
125	10							182.63	3.25	0.197	0.002	0.506
126	10							182.63	3.25	0.197	0.002	0.508
127	14							182.63	3.25	0.197	0.002	0.511
128	11							182.63	3.26	0.196	0.002	0.513
129	9							182.64	3.26	0.196	0.002	0.516
130	11							182.65	3.27	0.195	0.002	0.518
131	9							182.65	3.28	0.194	0.002	0.521
132	9							182.67	3.30	0.192	0.002	0.523
133	10							182.68	3.30	0.192	0.002	0.526
134	13							182.68	3.30	0.192	0.002	0.528
135	10							182.73	3.36	0.187	0.002	0.530
136	9							182.74	3.36	0.186	0.002	0.533
137	10							182.74	3.36	0.186	0.002	0.535
138	12							182.74	3.37	0.186	0.002	0.537
139	10							182.75	3.37	0.185	0.002	0.540
140	12							182.75	3.37	0.185	0.002	0.542
141	9							182.76	3.38	0.185	0.002	0.544
142	8							182.76	3.39	0.184	0.002	0.547
143	11							182.76	3.39	0.184	0.002	0.549
144	11							182.77	3.39	0.184	0.002	0.551
145	10							182.79	3.41	0.182	0.002	0.554
146	11							182.79	3.41	0.182	0.002	0.556
147	9							182.80	3.42	0.181	0.002	0.558
148	12							182.81	3.43	0.180	0.002	0.561
149	10							182.82	3.45	0.178	0.002	0.563
150	10							182.83	3.45	0.178	0.002	0.565
151	7							182.83	3.45	0.178	0.002	0.567
152	8							182.83	3.46	0.178	0.002	0.570
153	13							182.83	3.46	0.178	0.002	0.572

154	12							182.86	3.48	0.175	0.002	0.574
155	11							182.86	3.48	0.175	0.002	0.576
156	8							182.87	3.49	0.175	0.002	0.578
157	8							182.88	3.50	0.174	0.002	0.581
158	10							182.88	3.50	0.173	0.002	0.583
159	10							182.88	3.51	0.173	0.002	0.585
160	10							182.90	3.52	0.172	0.002	0.587
161	10							182.90	3.53	0.172	0.002	0.589
162	9							182.91	3.53	0.171	0.002	0.592
163	10							182.91	3.54	0.171	0.002	0.594
164	10							182.92	3.54	0.170	0.002	0.596
165	9							182.92	3.54	0.170	0.002	0.598
166	9							182.94	3.56	0.168	0.002	0.600
167	8							182.95	3.57	0.167	0.002	0.602
168	11							182.96	3.58	0.167	0.002	0.604
169	10							182.96	3.59	0.166	0.002	0.606
170	11							182.97	3.60	0.166	0.002	0.609
171	11							182.98	3.60	0.165	0.002	0.611
172	11							182.98	3.61	0.165	0.002	0.613
173	11							182.99	3.61	0.165	0.002	0.615
174	10							182.99	3.61	0.164	0.002	0.617
175	11							183.02	3.64	0.162	0.002	0.619
176	9							183.03	3.65	0.161	0.002	0.621
177	11							183.03	3.65	0.161	0.002	0.623
178	11							183.03	3.65	0.161	0.002	0.625
179	11							183.04	3.66	0.161	0.002	0.627
180	10							183.05	3.68	0.159	0.002	0.629
181	13							183.08	3.70	0.157	0.002	0.631
182	12							183.08	3.70	0.157	0.002	0.633
183	11							183.09	3.71	0.157	0.002	0.635
184	13							183.11	3.73	0.155	0.002	0.637
185	12							183.12	3.74	0.154	0.002	0.639
186	11							183.13	3.75	0.153	0.002	0.641
187	9							183.13	3.75	0.153	0.002	0.643
188	10							183.14	3.76	0.153	0.002	0.645
189	9							183.14	3.77	0.152	0.002	0.647
190	11							183.16	3.78	0.151	0.002	0.649
191	10							183.17	3.79	0.150	0.002	0.651
192	9							183.17	3.79	0.150	0.002	0.652
193	11							183.18	3.80	0.150	0.002	0.654
194	10							183.18	3.80	0.150	0.002	0.656
195	11							183.19	3.81	0.149	0.002	0.658
196	10							183.19	3.82	0.148	0.002	0.660
197	10							183.20	3.82	0.148	0.002	0.662
198	8							183.20	3.82	0.148	0.002	0.664
199	12							183.20	3.82	0.148	0.002	0.666
200	12							183.21	3.84	0.147	0.002	0.667
201	11							183.22	3.84	0.147	0.002	0.669
202	10							183.22	3.84	0.146	0.002	0.671
203	10							183.22	3.85	0.146	0.002	0.673
204	11							183.25	3.87	0.144	0.002	0.675
205	10							183.25	3.87	0.144	0.002	0.677
206	10							183.26	3.88	0.143	0.002	0.678
207	13							183.26	3.89	0.143	0.002	0.680
208	11							183.27	3.90	0.143	0.002	0.682

209	9													183.28	3.90	0.142	0.002	0.684
210	8													183.28	3.90	0.142	0.002	0.686
211	10													183.28	3.90	0.142	0.002	0.687
212	10													183.28	3.90	0.142	0.002	0.689
213	9													183.30	3.92	0.141	0.002	0.691
214	10													183.32	3.94	0.140	0.002	0.693
215	11													183.33	3.95	0.139	0.002	0.695
216	11													183.33	3.95	0.139	0.002	0.696
217	11													183.34	3.96	0.138	0.002	0.698
218	10													183.34	3.97	0.138	0.002	0.700
219	9													183.34	3.97	0.138	0.002	0.702
220	12													183.36	3.98	0.136	0.002	0.703
221	10													183.37	4.00	0.135	0.002	0.705
222	10													183.38	4.00	0.135	0.002	0.707
223	10													183.38	4.00	0.135	0.002	0.708
224	9													183.38	4.00	0.135	0.002	0.710
225	9													183.41	4.03	0.133	0.002	0.712
226	10													183.42	4.05	0.132	0.002	0.714
227	11													183.43	4.06	0.132	0.002	0.715
228	9													183.44	4.06	0.131	0.002	0.717
229	11													183.45	4.08	0.130	0.002	0.718
230	11													183.45	4.08	0.130	0.002	0.720
231	12													183.46	4.08	0.130	0.002	0.722
232	9													183.46	4.08	0.130	0.002	0.723
233	10													183.47	4.09	0.129	0.002	0.725
234	11													183.47	4.10	0.129	0.002	0.727
235	11													183.47	4.10	0.129	0.002	0.728
236	10													183.48	4.10	0.129	0.002	0.730
237	11													183.48	4.11	0.128	0.002	0.732
238	12													183.49	4.12	0.128	0.002	0.733
239	10													183.50	4.12	0.127	0.002	0.735
240	12													183.51	4.13	0.127	0.002	0.736
241	8													183.53	4.15	0.126	0.002	0.738
242	10													183.54	4.16	0.125	0.002	0.740

model average

β	0.01	0.02	-0.01	0.07	-0.01	0.03	0.12	-0.02	0.02	0.10	-0.03	0.01	0.26	0.56
variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
relative														
importance	0.29	0.36	0.36	1.00	0.41	0.54	1.00	0.41	0.38	1.00	0.57	0.30	1.00	1.00
95% CI	0.03	0.06	0.05	0.06	0.04	0.06	0.07	0.06	0.06	0.07	0.07	0.03	0.06	0.05

Table S3.51. Cyprus Warbler summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	11																													480.11	0.00	1.000	0.214	0.214			
2	10																													480.89	0.78	0.677	0.145	0.359			
3	10																													482.48	2.36	0.307	0.066	0.425			
4	10																													482.51	2.40	0.302	0.065	0.489			
5	9																													482.58	2.47	0.291	0.062	0.551			
6	10																													482.76	2.64	0.267	0.057	0.609			
7	9																													483.27	3.16	0.206	0.044	0.653			
8	9																													483.28	3.16	0.206	0.044	0.697			
model average																																					
	β																											-0.36	0.36	0.27	-0.37	1.18	-0.39	0.08	0.44	0.54	-0.86
	variance																											0.06	0.02	0.03	0.02	0.05	0.02	0.01	0.10	0.01	0.03
	relative importance																											0.84	1.00	0.85	1.00	1.00	1.00	0.58	0.82	1.00	1.00
	95% CI																											0.45	0.28	0.33	0.27	0.46	0.27	0.19	0.61	0.22	0.36

Table S3.52. Cyprus Warbler summer incidence, intercorrelation model (b)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																												215.25	0.00	1.000	0.310	0.310	
2	8						■				■						■		■										215.93	0.68	0.711	0.220	0.530	
3	8																		■										216.47	1.22	0.543	0.168	0.698	
4	7																												217.68	2.43	0.297	0.092	0.790	
5	8						■																		■				217.85	2.60	0.272	0.084	0.874	
6	7						■				■																		219.16	3.92	0.141	0.044	0.918	
7	7										■								■		■								219.34	4.10	0.129	0.040	0.958	
model average																																		
	β						-0.04				0.10						0.12		-0.03		0.12							0.05		0.13	0.35			
	variance						0.00				0.00						0.00		0.00		0.00							0.00		0.00	0.00			
	relative importance						0.69				1.00						1.00		0.63		1.00							0.82		1.00	1.00			
	95% CI						0.07				0.06						0.06		0.07		0.06							0.07		0.06	0.06			

Table S3.53. Cyprus Warbler summer incidence, intercorrelation model (d)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	10																													214.36	0.00	1.000	0.122	0.122	
2	9																														215.25	0.88	0.643	0.079	0.201
3	11																														215.51	1.14	0.564	0.069	0.270
4	9																														215.53	1.17	0.558	0.068	0.339
5	9																														215.77	1.40	0.496	0.061	0.399
6	8																														215.93	1.57	0.457	0.056	0.455
7	9																														216.26	1.90	0.386	0.047	0.503
8	8																														216.47	2.10	0.349	0.043	0.546
9	10																														216.93	2.56	0.278	0.034	0.580
10	10																														216.97	2.60	0.272	0.033	0.613
11	10																														217.14	2.78	0.249	0.030	0.643
12	10																														217.18	2.81	0.245	0.030	0.673
13	8																														217.52	3.16	0.206	0.025	0.699
14	8																														217.67	3.31	0.191	0.023	0.722
15	7																														217.68	3.31	0.191	0.023	0.745
16	9																														217.72	3.36	0.187	0.023	0.768
17	8																														217.85	3.49	0.175	0.021	0.790
18	9																														218.32	3.96	0.138	0.017	0.807
19	8																														218.42	4.06	0.132	0.016	0.823
model average																																			
	β						-0.04				0.10						0.11		-0.04		0.14				-0.04	0.05		0.01	0.13	0.35					
	variance						0.00				0.00						0.00		0.00		0.00				0.00	0.00		0.00	0.00	0.00					
	relative importance						0.72				1.00						1.00		0.71		1.00				0.64	0.83		0.29	1.00	1.00					
	95% CI						0.07				0.07						0.06		0.07		0.08				0.08	0.07		0.04	0.06	0.06					

Table S3.54. Cyprus Warbler winter abundance, intercorrelations model (b)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights																							
1	11																													639.06	0.00	1.000	0.271	0.271																							
2	10																													639.81	0.75	0.687	0.186	0.457																							
3	10																													641.81	2.75	0.253	0.068	0.525																							
4	10																													642.35	3.29	0.193	0.052	0.578																							
5	9																													642.67	3.61	0.165	0.045	0.622																							
6	9																													643.12	4.06	0.132	0.036	0.658																							
model average																																																									
	β	0.23						-0.20			0.34						0.25			0.18	0.49		-0.45		0.18			0.42	0.07																												
	variance	0.02						0.04			0.01						0.01			0.02	0.02		0.04		0.01			0.01	0.01																												
	relative importance	0.87						0.65			1.00						1.00			0.77	1.00		1.00		1.00			1.00	1.00																												
	95% CI	0.27						0.41			0.21						0.20			0.26	0.27		0.37		0.16			0.18	0.22																												

Table S3.55. Cyprus Warbler winter abundance, intercorrelations model (c)

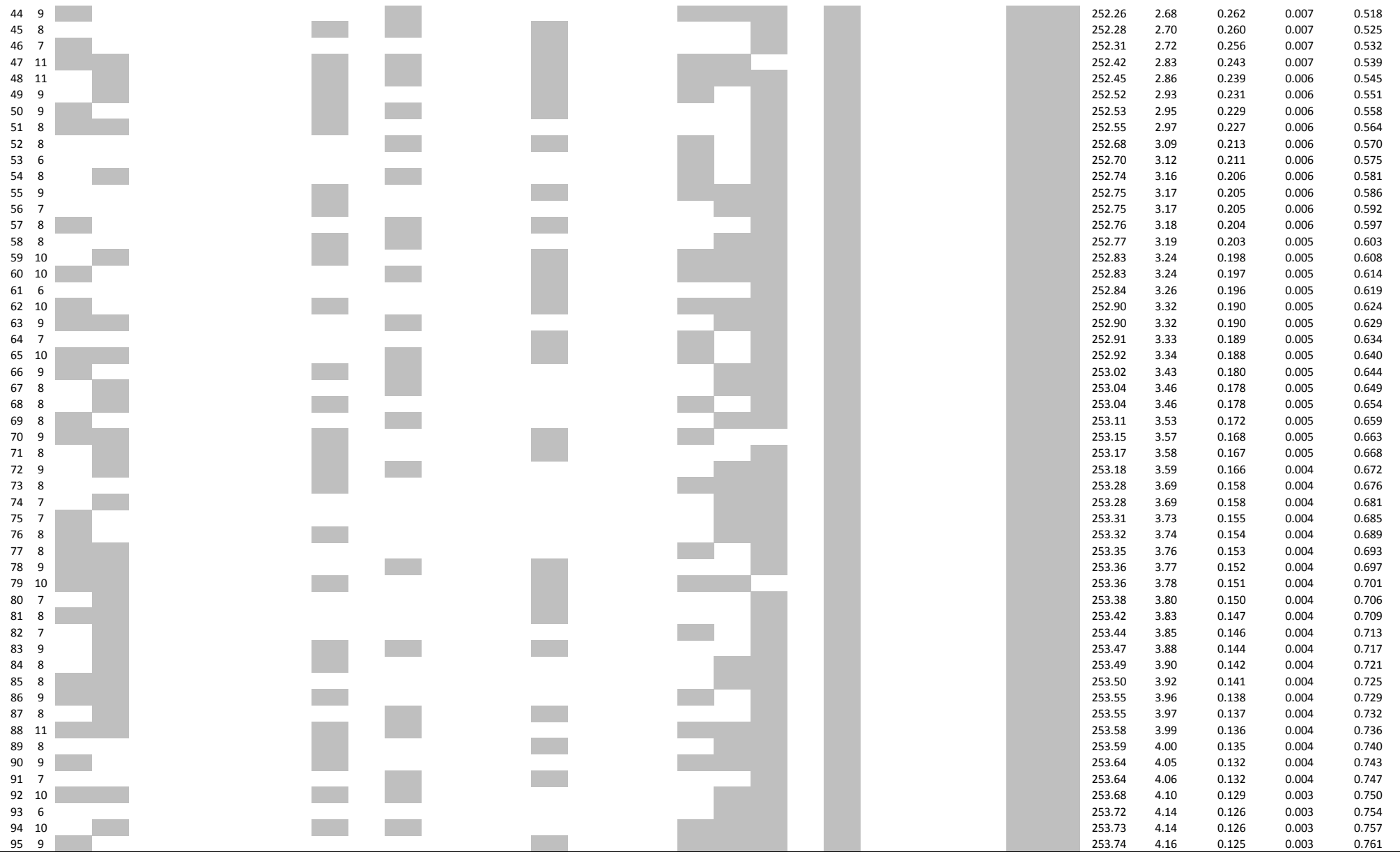
Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	12																												636.93	0.00	1.000	0.182	0.182	
2	11																												637.33	0.40	0.820	0.150	0.332	
3	11																												638.90	1.97	0.374	0.068	0.400	
4	11																												639.06	2.13	0.345	0.063	0.463	
5	11																												639.14	2.20	0.332	0.061	0.524	
6	10																												639.33	2.39	0.302	0.055	0.579	
7	10																												639.46	2.52	0.284	0.052	0.631	
8	10																												639.81	2.88	0.237	0.043	0.674	
9	10																												641.02	4.09	0.130	0.024	0.698	
10	9																												641.08	4.14	0.126	0.023	0.721	
model average																																		
	β	0.19						-0.17		0.33					-0.28	0.41			0.15	0.45		-0.48		0.18			0.42	0.05						
	variance	0.02						0.04		0.01					0.03	0.02			0.02	0.02		0.04		0.01			0.01	0.01						
	relative importance	0.78						0.59		1.00					0.85	1.00			0.73	1.00		1.00		1.00			1.00	1.00						
	95% CI	0.28						0.39		0.21					0.35	0.28			0.25	0.27		0.37		0.15			0.18	0.22						

Table S3.56. Cyprus Warbler winter incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																												249.59	0.00	1.000	0.027	0.027	
2	8																												249.84	0.25	0.881	0.024	0.051	
3	12																												249.87	0.28	0.869	0.024	0.074	
4	10																												249.91	0.33	0.849	0.023	0.097	
5	8																												250.26	0.68	0.713	0.019	0.117	
6	9																												250.27	0.69	0.710	0.019	0.136	
7	6																												250.86	1.28	0.528	0.014	0.150	
8	11																												250.88	1.30	0.523	0.014	0.164	
9	9																												250.92	1.34	0.512	0.014	0.178	
10	11																												250.93	1.34	0.511	0.014	0.192	
11	8																												250.93	1.35	0.510	0.014	0.206	
12	7																												250.96	1.38	0.503	0.014	0.219	
13	9																												251.11	1.52	0.467	0.013	0.232	
14	8																												251.22	1.64	0.441	0.012	0.244	
15	7																												251.28	1.69	0.429	0.012	0.256	
16	7																												251.32	1.74	0.420	0.011	0.267	
17	8																												251.40	1.82	0.403	0.011	0.278	
18	6																												251.44	1.85	0.396	0.011	0.289	
19	7																												251.44	1.86	0.395	0.011	0.299	
20	7																												251.56	1.98	0.372	0.010	0.309	
21	10																												251.58	1.99	0.369	0.010	0.319	
22	10																												251.58	2.00	0.368	0.010	0.329	
23	8																												251.60	2.01	0.365	0.010	0.339	
24	7																												251.61	2.02	0.364	0.010	0.349	
25	6																												251.64	2.05	0.359	0.010	0.359	
26	8																												251.64	2.05	0.358	0.010	0.368	
27	9																												251.74	2.15	0.341	0.009	0.378	
28	11																												251.74	2.16	0.340	0.009	0.387	
29	7																												251.76	2.17	0.337	0.009	0.396	
30	7																												251.82	2.24	0.327	0.009	0.405	
31	7																												251.83	2.24	0.326	0.009	0.414	
32	9																												251.84	2.25	0.324	0.009	0.422	
33	5																												251.84	2.26	0.323	0.009	0.431	
34	9																												251.86	2.27	0.321	0.009	0.440	
35	8																												251.87	2.29	0.319	0.009	0.449	
36	10																												251.89	2.31	0.315	0.009	0.457	
37	7																												251.97	2.39	0.303	0.008	0.465	
38	10																												252.04	2.45	0.293	0.008	0.473	
39	9																												252.10	2.52	0.284	0.008	0.481	
40	8																												252.12	2.53	0.282	0.008	0.489	
41	10																												252.13	2.54	0.280	0.008	0.496	
42	10																												252.15	2.57	0.277	0.008	0.504	
43	6																												252.16	2.57	0.277	0.007	0.511	



model average

β -0.03 -0.01 -0.04 0.03 -0.03 -0.05 -0.01 0.10 -0.11 0.17 0.50

variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
relative											
importance	0.56	0.39	0.65	0.59	0.44	0.60	0.27	0.97	1.00	1.00	1.00
95% CI	0.07	0.07	0.09	0.08	0.08	0.10	0.04	0.08	0.09	0.07	0.06

Table S3.57. Spotted Flycatcher summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	8	■																												159.65	0.00	1.000	0.510	0.510		
2	9										■			■																	161.63	1.98	0.372	0.190	0.700	
3	7										■						■														162.92	3.27	0.195	0.099	0.800	
model average																																				
β	1.00										-1.17		0.76																							
variance	0.04										0.14		0.17																							
relative importance	1.00										1.00		0.88																							
95% CI	0.41										0.73		0.76																							

Table S3.59. Masked Shrike summer abundance

Land-cover buffer scale: 1.25 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	11																													175.32	0.00	1.000	0.013	0.013
2	10																													175.69	0.37	0.829	0.011	0.024
3	8																													175.80	0.49	0.784	0.010	0.035
4	10																													175.87	0.56	0.757	0.010	0.044
5	9																													175.88	0.56	0.755	0.010	0.054
6	10																													175.94	0.62	0.732	0.010	0.064
7	12																													175.99	0.67	0.716	0.009	0.074
8	8																													176.27	0.95	0.622	0.008	0.082
9	7																													176.27	0.95	0.621	0.008	0.090
10	11																													176.31	1.00	0.608	0.008	0.098
11	12																													176.33	1.01	0.603	0.008	0.106
12	11																													176.51	1.19	0.550	0.007	0.113
13	9																													176.54	1.22	0.544	0.007	0.120
14	11																													176.56	1.24	0.538	0.007	0.128
15	11																													176.61	1.29	0.524	0.007	0.134
16	9																													176.76	1.44	0.486	0.006	0.141
17	9																													176.88	1.56	0.458	0.006	0.147
18	8																													176.88	1.57	0.457	0.006	0.153
19	9																													176.89	1.57	0.457	0.006	0.159
20	9																													176.89	1.58	0.455	0.006	0.165
21	9																													176.94	1.62	0.444	0.006	0.171
22	9																													176.98	1.66	0.436	0.006	0.177
23	9																													177.10	1.78	0.411	0.005	0.182
24	10																													177.11	1.79	0.408	0.005	0.187
25	10																													177.11	1.79	0.408	0.005	0.193
26	8																													177.18	1.86	0.394	0.005	0.198
27	10																													177.24	1.92	0.382	0.005	0.203
28	11																													177.25	1.93	0.381	0.005	0.208
29	8																													177.27	1.95	0.376	0.005	0.213
30	12																													177.28	1.97	0.374	0.005	0.218
31	11																													177.30	1.99	0.371	0.005	0.223
32	13																													177.31	2.00	0.369	0.005	0.228
33	10																													177.32	2.00	0.368	0.005	0.233
34	12																													177.33	2.01	0.366	0.005	0.237
35	10																													177.35	2.04	0.361	0.005	0.242
36	10																													177.35	2.04	0.361	0.005	0.247
37	10																													177.40	2.09	0.352	0.005	0.252
38	9																													177.41	2.09	0.352	0.005	0.256
39	11																													177.42	2.10	0.350	0.005	0.261
40	11																													177.49	2.17	0.338	0.004	0.265
41	13																													177.53	2.21	0.331	0.004	0.270
42	9																													177.55	2.24	0.327	0.004	0.274
43	10																													177.56	2.24	0.327	0.004	0.278

44	10									177.56	2.25	0.325	0.004	0.283
45	8									177.58	2.27	0.322	0.004	0.287
46	10									177.59	2.27	0.321	0.004	0.291
47	10									177.62	2.30	0.317	0.004	0.295
48	12									177.62	2.31	0.316	0.004	0.299
49	8									177.64	2.33	0.313	0.004	0.304
50	9									177.66	2.34	0.310	0.004	0.308
51	9									177.70	2.38	0.304	0.004	0.312
52	7									177.71	2.40	0.302	0.004	0.316
53	9									177.74	2.42	0.298	0.004	0.320
54	12									177.77	2.45	0.294	0.004	0.323
55	9									177.77	2.45	0.293	0.004	0.327
56	13									177.77	2.45	0.293	0.004	0.331
57	9									177.79	2.47	0.290	0.004	0.335
58	7									177.79	2.47	0.290	0.004	0.339
59	10									177.79	2.47	0.290	0.004	0.343
60	10									177.83	2.52	0.284	0.004	0.346
61	11									177.89	2.57	0.276	0.004	0.350
62	14									177.90	2.58	0.275	0.004	0.354
63	9									177.92	2.60	0.273	0.004	0.357
64	7									177.93	2.61	0.271	0.004	0.361
65	9									177.96	2.64	0.267	0.004	0.364
66	12									177.97	2.65	0.266	0.004	0.368
67	8									177.97	2.66	0.265	0.003	0.371
68	8									178.01	2.69	0.261	0.003	0.375
69	9									178.04	2.73	0.256	0.003	0.378
70	8									178.04	2.73	0.256	0.003	0.382
71	11									178.08	2.76	0.251	0.003	0.385
72	12									178.08	2.77	0.251	0.003	0.388
73	8									178.11	2.79	0.248	0.003	0.392
74	7									178.11	2.79	0.247	0.003	0.395
75	13									178.13	2.82	0.245	0.003	0.398
76	10									178.16	2.85	0.241	0.003	0.401
77	12									178.17	2.85	0.240	0.003	0.404
78	10									178.18	2.86	0.239	0.003	0.408
79	11									178.20	2.88	0.237	0.003	0.411
80	9									178.25	2.93	0.231	0.003	0.414
81	8									178.26	2.94	0.230	0.003	0.417
82	10									178.29	2.97	0.227	0.003	0.420
83	11									178.31	2.99	0.224	0.003	0.423
84	6									178.34	3.02	0.221	0.003	0.426
85	10									178.36	3.04	0.218	0.003	0.428
86	12									178.37	3.06	0.217	0.003	0.431
87	10									178.39	3.08	0.215	0.003	0.434
88	13									178.41	3.09	0.213	0.003	0.437
89	11									178.41	3.10	0.213	0.003	0.440
90	9									178.42	3.11	0.212	0.003	0.443
91	10									178.44	3.12	0.210	0.003	0.445
92	5									178.45	3.13	0.209	0.003	0.448
93	10									178.47	3.16	0.206	0.003	0.451
94	6									178.48	3.17	0.205	0.003	0.454
95	8									178.48	3.17	0.205	0.003	0.456
96	10									178.50	3.18	0.204	0.003	0.459
97	9									178.50	3.19	0.203	0.003	0.462
98	12									178.51	3.20	0.202	0.003	0.464

99	7										178.51	3.20	0.202	0.003	0.467
100	11										178.52	3.20	0.202	0.003	0.470
101	9										178.53	3.21	0.201	0.003	0.472
102	10										178.53	3.22	0.200	0.003	0.475
103	10										178.54	3.22	0.200	0.003	0.478
104	10										178.56	3.25	0.197	0.003	0.480
105	10										178.60	3.28	0.194	0.003	0.483
106	11										178.61	3.29	0.193	0.003	0.485
107	11										178.63	3.32	0.191	0.003	0.488
108	11										178.65	3.33	0.189	0.002	0.490
109	9										178.66	3.34	0.188	0.002	0.493
110	8										178.67	3.35	0.187	0.002	0.495
111	10										178.67	3.35	0.187	0.002	0.498
112	11										178.69	3.38	0.185	0.002	0.500
113	11										178.70	3.38	0.184	0.002	0.503
114	8										178.70	3.38	0.184	0.002	0.505
115	9										178.71	3.40	0.183	0.002	0.507
116	13										178.73	3.41	0.182	0.002	0.510
117	8										178.74	3.42	0.181	0.002	0.512
118	6										178.74	3.43	0.180	0.002	0.515
119	8										178.75	3.43	0.180	0.002	0.517
120	10										178.75	3.43	0.180	0.002	0.519
121	9										178.75	3.43	0.180	0.002	0.522
122	10										178.76	3.44	0.179	0.002	0.524
123	6										178.77	3.45	0.178	0.002	0.526
124	11										178.78	3.46	0.177	0.002	0.529
125	10										178.78	3.46	0.177	0.002	0.531
126	7										178.80	3.48	0.176	0.002	0.533
127	10										178.80	3.48	0.175	0.002	0.536
128	11										178.81	3.49	0.175	0.002	0.538
129	10										178.84	3.52	0.172	0.002	0.540
130	7										178.84	3.52	0.172	0.002	0.543
131	11										178.84	3.52	0.172	0.002	0.545
132	8										178.86	3.54	0.170	0.002	0.547
133	10										178.86	3.55	0.170	0.002	0.549
134	9										178.88	3.56	0.168	0.002	0.552
135	11										178.90	3.58	0.167	0.002	0.554
136	11										178.93	3.61	0.164	0.002	0.556
137	11										178.96	3.64	0.162	0.002	0.558
138	12										178.96	3.65	0.162	0.002	0.560
139	11										178.99	3.67	0.159	0.002	0.562
140	9										179.00	3.68	0.159	0.002	0.564
141	11										179.00	3.68	0.159	0.002	0.567
142	7										179.00	3.68	0.159	0.002	0.569
143	8										179.02	3.71	0.157	0.002	0.571
144	8										179.04	3.72	0.156	0.002	0.573
145	7										179.04	3.72	0.156	0.002	0.575
146	12										179.04	3.72	0.155	0.002	0.577
147	11										179.04	3.73	0.155	0.002	0.579
148	12										179.05	3.73	0.155	0.002	0.581
149	11										179.05	3.73	0.155	0.002	0.583
150	11										179.10	3.78	0.151	0.002	0.585
151	10										179.10	3.78	0.151	0.002	0.587
152	11										179.10	3.78	0.151	0.002	0.589
153	10										179.10	3.79	0.151	0.002	0.591

154	9										179.13	3.81	0.149	0.002	0.593
155	10										179.15	3.83	0.147	0.002	0.595
156	9										179.15	3.84	0.147	0.002	0.597
157	7										179.16	3.84	0.147	0.002	0.599
158	11										179.16	3.84	0.146	0.002	0.601
159	10										179.16	3.84	0.146	0.002	0.603
160	9										179.18	3.86	0.145	0.002	0.605
161	12										179.19	3.88	0.144	0.002	0.606
162	9										179.20	3.88	0.144	0.002	0.608
163	10										179.20	3.89	0.143	0.002	0.610
164	12										179.21	3.89	0.143	0.002	0.612
165	9										179.21	3.89	0.143	0.002	0.614
166	10										179.22	3.90	0.142	0.002	0.616
167	8										179.23	3.91	0.142	0.002	0.618
168	6										179.23	3.91	0.142	0.002	0.620
169	11										179.23	3.91	0.142	0.002	0.621
170	10										179.23	3.91	0.141	0.002	0.623
171	8										179.24	3.92	0.141	0.002	0.625
172	9										179.24	3.93	0.140	0.002	0.627
173	8										179.25	3.93	0.140	0.002	0.629
174	10										179.26	3.94	0.139	0.002	0.631
175	12										179.26	3.94	0.139	0.002	0.633
176	10										179.27	3.96	0.138	0.002	0.634
177	10										179.29	3.97	0.137	0.002	0.636
178	10										179.31	3.99	0.136	0.002	0.638
179	9										179.31	3.99	0.136	0.002	0.640
180	7										179.32	4.00	0.135	0.002	0.642
181	10										179.35	4.03	0.133	0.002	0.643
182	10										179.35	4.03	0.133	0.002	0.645
183	8										179.36	4.04	0.133	0.002	0.647
184	9										179.36	4.05	0.132	0.002	0.649
185	8										179.37	4.06	0.132	0.002	0.650
186	11										179.39	4.07	0.131	0.002	0.652
187	8										179.39	4.07	0.130	0.002	0.654
188	9										179.39	4.07	0.130	0.002	0.655
189	11										179.39	4.08	0.130	0.002	0.657
190	11										179.40	4.08	0.130	0.002	0.659
191	8										179.41	4.09	0.130	0.002	0.661
192	12										179.41	4.09	0.129	0.002	0.662
193	6										179.41	4.09	0.129	0.002	0.664
194	10										179.41	4.09	0.129	0.002	0.666
195	9										179.42	4.10	0.129	0.002	0.667
196	11										179.43	4.12	0.128	0.002	0.669
197	6										179.44	4.13	0.127	0.002	0.671
198	10										179.45	4.13	0.127	0.002	0.672
199	10										179.48	4.17	0.125	0.002	0.674

model average													
β	-0.38	0.71	0.13	0.44	1.16	-0.08	0.47	-0.23	0.48	1.03	0.90	0.10	-3.16
variance	0.15	0.28	0.07	0.11	0.21	0.07	0.32	0.15	0.29	0.13	0.21	0.03	0.33
relative													
importance	0.63	0.83	0.34	0.83	1.00	0.26	0.54	0.39	0.62	1.00	0.93	0.38	1.00
95% CI	0.76	1.00	0.45	0.63	0.89	0.37	1.08	0.69	1.04	0.70	0.87	0.32	1.11

Table S3.60. Masked Shrike summer incidence

Land-cover buffer scale: 1 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	7																													69.34	0.00	1.000	0.103	0.103		
2	8																														69.68	0.34	0.843	0.087	0.190	
3	8																														70.39	1.05	0.593	0.061	0.251	
4	9																														70.73	1.39	0.499	0.051	0.303	
5	7																														71.15	1.81	0.405	0.042	0.345	
6	6																														71.37	2.03	0.362	0.037	0.382	
7	7																														71.58	2.24	0.327	0.034	0.416	
8	6																														71.97	2.63	0.268	0.028	0.443	
9	8																														72.00	2.66	0.264	0.027	0.471	
10	6																														72.14	2.81	0.246	0.025	0.496	
11	7																														72.17	2.83	0.243	0.025	0.521	
12	7																														72.38	3.04	0.219	0.023	0.544	
13	5																														72.43	3.09	0.214	0.022	0.566	
14	6																														72.55	3.21	0.201	0.021	0.586	
15	6																														72.62	3.28	0.194	0.020	0.606	
16	6																														72.72	3.38	0.185	0.019	0.626	
17	8																														72.74	3.40	0.183	0.019	0.644	
18	7																														72.74	3.40	0.183	0.019	0.663	
19	6																														72.75	3.42	0.181	0.019	0.682	
20	7																														72.78	3.44	0.179	0.018	0.700	
21	8																														73.19	3.85	0.146	0.015	0.715	
22	7																														73.28	3.94	0.139	0.014	0.730	
23	5																														73.41	4.07	0.130	0.013	0.743	
24	7																														73.44	4.11	0.128	0.013	0.757	
25	8																														73.49	4.15	0.126	0.013	0.770	
model average																																				
	β				0.04			0.01			0.01												-0.04	0.09		0.04	0.04	0.10								
	variance				0.00			0.00			0.00												0.00	0.00		0.00	0.00									
	relative importance				0.80			0.42			0.46												0.78	1.00		0.82	0.84	1.00								
	95% CI				0.05			0.03			0.04												0.06	0.06		0.06	0.05	0.04								

Table S3.61. Sparrows summer abundance

Land-cover buffer scale: 0.75 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	10																												1316.36	0.00	1.000	0.059	0.059	
2	9																												1316.38	0.02	0.988	0.058	0.117	
3	7																												1316.51	0.16	0.925	0.055	0.172	
4	11																												1316.56	0.20	0.904	0.053	0.225	
5	8																												1317.12	0.76	0.684	0.040	0.266	
6	10																												1317.20	0.85	0.655	0.039	0.304	
7	9																												1317.47	1.11	0.574	0.034	0.338	
8	8																												1317.51	1.15	0.562	0.033	0.371	
9	10																												1317.51	1.16	0.561	0.033	0.404	
10	8																												1317.65	1.29	0.525	0.031	0.435	
11	8																												1317.66	1.30	0.522	0.031	0.466	
12	9																												1317.76	1.40	0.496	0.029	0.495	
13	6																												1317.96	1.60	0.450	0.027	0.522	
14	8																												1318.02	1.66	0.436	0.026	0.548	
15	9																												1318.04	1.68	0.431	0.025	0.573	
16	7																												1318.10	1.74	0.420	0.025	0.598	
17	9																												1318.16	1.80	0.406	0.024	0.622	
18	10																												1318.33	1.97	0.373	0.022	0.644	
19	9																												1318.39	2.03	0.362	0.021	0.665	
20	8																												1318.81	2.45	0.294	0.017	0.683	
21	9																												1318.85	2.50	0.287	0.017	0.700	
22	9																												1318.87	2.51	0.285	0.017	0.716	
23	7																												1318.96	2.60	0.273	0.016	0.732	
24	7																												1318.99	2.63	0.269	0.016	0.748	
25	9																												1319.26	2.90	0.235	0.014	0.762	
26	6																												1319.57	3.21	0.201	0.012	0.774	
27	7																												1319.65	3.29	0.193	0.011	0.785	
28	8																												1319.67	3.31	0.191	0.011	0.797	
29	8																												1319.69	3.33	0.189	0.011	0.808	
30	8																												1319.73	3.37	0.185	0.011	0.819	
31	8																												1319.75	3.39	0.184	0.011	0.830	
32	8																												1319.77	3.42	0.181	0.011	0.840	
33	7																												1319.79	3.43	0.180	0.011	0.851	
34	10																												1319.83	3.47	0.176	0.010	0.861	
35	10																												1320.12	3.76	0.152	0.009	0.870	
36	9																												1320.35	3.99	0.136	0.008	0.878	
37	7																												1320.40	4.04	0.132	0.008	0.886	
38	7																												1320.46	4.10	0.129	0.008	0.894	

model average											
β	0.12	0.11		0.36	-0.23	0.44		-0.07	0.07	-0.50	2.16
variance	0.01	0.02		0.01	0.02	0.02		0.01	0.01	0.02	0.01
relative											
importance	0.71	0.59		1.00	0.87	1.00		0.49	0.45	1.00	1.00
95% CI	0.22	0.25		0.18	0.25	0.25		0.20	0.21	0.27	0.18

Table S3.62. Sparrows summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	7	█					█																							204.68	0.00	1.000	0.165	0.165			
2	8	█					█								█															205.58	0.90	0.638	0.105	0.270			
3	6																							█						205.84	1.16	0.559	0.092	0.362			
4	5																													205.91	1.24	0.538	0.089	0.450			
5	8																													206.12	1.45	0.485	0.080	0.530			
6	6																													207.06	2.38	0.303	0.050	0.580			
7	9														█															207.14	2.46	0.292	0.048	0.628			
8	6																													207.54	2.87	0.239	0.039	0.667			
9	7																													207.68	3.00	0.223	0.037	0.704			
10	7																													207.77	3.09	0.213	0.035	0.739			
11	6																													207.91	3.24	0.198	0.033	0.772			
12	7																													208.35	3.67	0.159	0.026	0.798			
model average																																					
	β	0.07					0.08			0.12																											
	variance	0.00					0.00			0.00																											
	relative importance	1.00					1.00			1.00					0.28																						
	95% CI	0.06					0.06			0.06					0.03																						

Table S3.63. Sparrows winter abundance

Land-cover buffer scale: 0.75 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	9																													1178.36	0.00	1.000	0.326	0.326			
2	8																													1179.56	1.20	0.549	0.179	0.506			
3	10																													1180.01	1.65	0.439	0.143	0.649			
4	9																													1181.25	2.89	0.236	0.077	0.726			
5	8																													1181.80	3.43	0.180	0.059	0.784			
model average																																					
	β					0.41	0.42	-0.43				0.29				0.22																					
	variance					0.02	0.01	0.02				0.01				0.01																					
	relative importance					1.00	1.00	1.00				1.00				0.93																					
	95% CI					0.24	0.21	0.25				0.23				0.23																					

Table S3.64. Sparrows winter incidence, intercorrelations model (b)

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	9																												217.94	0.00	1.000	0.061	0.061	
2	8																													218.34	0.40	0.819	0.050	0.110
3	10																													218.86	0.92	0.631	0.038	0.148
4	7																													218.99	1.05	0.591	0.036	0.184
5	7																													219.02	1.08	0.582	0.035	0.219
6	6																													219.11	1.17	0.557	0.034	0.253
7	8																													219.25	1.31	0.518	0.031	0.284
8	8																													219.34	1.40	0.495	0.030	0.314
9	9																													219.52	1.58	0.453	0.027	0.342
10	9																													219.80	1.86	0.395	0.024	0.366
11	8																													219.84	1.90	0.386	0.023	0.389
12	7																													219.85	1.91	0.384	0.023	0.412
13	7																													220.13	2.20	0.334	0.020	0.433
14	9																													220.17	2.23	0.327	0.020	0.452
15	7																													220.25	2.32	0.314	0.019	0.471
16	8																													220.33	2.40	0.302	0.018	0.490
17	6																													220.39	2.46	0.293	0.018	0.507
18	5																													220.47	2.53	0.282	0.017	0.524
19	9																													220.47	2.53	0.282	0.017	0.541
20	7																													220.55	2.62	0.270	0.016	0.558
21	8																													220.66	2.72	0.256	0.016	0.573
22	6																													220.67	2.73	0.255	0.015	0.589
23	6																													220.79	2.86	0.240	0.015	0.603
24	8																													220.80	2.86	0.239	0.014	0.618
25	5																													220.80	2.86	0.239	0.014	0.632
26	6																													221.21	3.28	0.194	0.012	0.644
27	8																													221.26	3.32	0.190	0.012	0.656
28	8																													221.28	3.34	0.188	0.011	0.667
29	8																													221.29	3.36	0.187	0.011	0.678
30	7																													221.40	3.46	0.177	0.011	0.689
31	8																													221.41	3.48	0.176	0.011	0.700
32	7																													221.53	3.60	0.165	0.010	0.710
33	6																													221.55	3.61	0.164	0.010	0.720
34	6																													221.59	3.65	0.161	0.010	0.729
35	7																													221.60	3.66	0.160	0.010	0.739
36	7																													221.74	3.80	0.150	0.009	0.748
37	7																													221.77	3.83	0.147	0.009	0.757
38	8																													221.77	3.84	0.147	0.009	0.766
39	7																													221.82	3.88	0.144	0.009	0.775
40	6																													221.85	3.91	0.142	0.009	0.783
41	4																													221.86	3.92	0.141	0.009	0.792
42	5																													221.89	3.95	0.139	0.008	0.800
43	7																													221.95	4.01	0.135	0.008	0.808

44	9								222.07	4.13	0.127	0.008	0.816
model average													
β		0.06	0.03	0.13	0.05	-0.02	0.13	-0.02	-0.10	0.03	0.66		
variance		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
relative													
importance		0.82	0.60	1.00	0.82	0.41	0.82	0.39	0.93	0.57	1.00		
95% CI		0.08	0.07	0.08	0.07	0.06	0.07	0.06	0.09	0.06	0.06		

Table S3.66. Common Linnet summer abundance

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights				
1	8																													395.01	0.00	1.000	0.501	0.501				
2	9																													396.62	1.61	0.446	0.223	0.724				
3	7																													399.11	4.09	0.129	0.065	0.789				
model average																																						
	β	0.39	-0.50													1.05	0.42																					
	variance	0.02	0.03													0.04	0.05																					
	relative importance	1.00	1.00													1.00	0.92																					
	95% CI	0.26	0.35													0.38	0.41																					

Table S3.67. Common Linnet summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights	
1	7	█																												187.58	0.00	1.000	0.120	0.120	
2	8	█		█												█									█	█				187.65	0.07	0.967	0.117	0.237	
3	9	█		█																					█	█				187.96	0.37	0.829	0.100	0.337	
4	8	█		█																					█	█				188.14	0.56	0.756	0.091	0.428	
5	6	█																											188.86	1.27	0.529	0.064	0.492		
6	7	█																			█								189.20	1.61	0.446	0.054	0.546		
7	8	█		█																					█	█			189.25	1.67	0.434	0.052	0.598		
8	7	█		█																					█	█			189.35	1.77	0.413	0.050	0.648		
9	6	█																											189.74	2.16	0.340	0.041	0.689		
10	7	█		█																									189.93	2.34	0.310	0.037	0.726		
11	7	█		█																									190.47	2.89	0.236	0.028	0.754		
12	8	█		█																	█								190.73	3.15	0.207	0.025	0.779		
13	7	█		█																					█	█			190.84	3.26	0.196	0.024	0.803		
14	8	█		█																					█	█			190.96	3.38	0.185	0.022	0.825		
15	6	█		█																									191.10	3.52	0.172	0.021	0.846		
16	6	█		█																					█				191.48	3.90	0.142	0.017	0.863		
17	7	█		█																					█	█			191.50	3.92	0.141	0.017	0.880		
18	5	█																											191.57	3.99	0.136	0.016	0.897		
model average																																			
β		0.08	-0.05												0.14					0.04					-0.02	-0.01		0.07	0.25						
variance		0.00	0.00												0.00					0.00					0.00	0.00		0.00	0.00						
relative importance		1.00	0.77												1.00					0.76					0.51	0.42		0.91	1.00						
95% CI		0.05	0.07												0.07					0.06					0.05	0.05		0.07	0.05						

Table S3.68. Common Linnet winter abundance, \hat{p} as offset

Land-cover buffer scale: 1 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	7																													591.67	0.00	1.000	0.528	0.528		
2	6																													593.89	2.22	0.329	0.174	0.703		
3	6																													594.55	2.89	0.236	0.125	0.827		
4	5																													594.98	3.31	0.191	0.101	0.928		
model average																																				
	β	-0.25						0.18																												
	variance	0.05						0.02																												
	relative importance	0.70						0.76																												
	95% CI	0.43						0.30																												

Table S3.70. Black-headed Bunting summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	ΔAICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights
1	6																												15.44	0.00	1.000	0.046	0.046	
2	7																												16.29	0.85	0.654	0.030	0.076	
3	7																												16.57	1.13	0.568	0.026	0.102	
4	7																												16.84	1.40	0.497	0.023	0.125	
5	8																												16.86	1.42	0.492	0.023	0.148	
6	5																												16.95	1.50	0.471	0.022	0.169	
7	7																												17.11	1.67	0.434	0.020	0.189	
8	5																												17.19	1.75	0.416	0.019	0.208	
9	7																												17.36	1.91	0.384	0.018	0.226	
10	7																												17.36	1.92	0.384	0.018	0.244	
11	6																												17.36	1.92	0.383	0.018	0.261	
12	4																												17.62	2.18	0.336	0.015	0.277	
13	6																												17.89	2.45	0.294	0.014	0.290	
14	8																												17.90	2.46	0.293	0.013	0.304	
15	8																												17.98	2.54	0.280	0.013	0.317	
16	5																												18.04	2.60	0.273	0.013	0.329	
17	6																												18.05	2.61	0.272	0.012	0.342	
18	6																												18.15	2.71	0.259	0.012	0.354	
19	8																												18.15	2.71	0.258	0.012	0.366	
20	8																												18.18	2.74	0.254	0.012	0.377	
21	6																												18.24	2.79	0.247	0.011	0.389	
22	6																												18.24	2.80	0.247	0.011	0.400	
23	8																												18.51	3.06	0.216	0.010	0.410	
24	8																												18.55	3.11	0.211	0.010	0.420	
25	8																												18.58	3.14	0.209	0.010	0.429	
26	6																												18.58	3.14	0.208	0.010	0.439	
27	7																												18.70	3.26	0.196	0.009	0.448	
28	5																												18.71	3.27	0.195	0.009	0.457	
29	9																												18.73	3.29	0.193	0.009	0.466	
30	8																												18.78	3.34	0.188	0.009	0.474	
31	6																												18.81	3.37	0.186	0.009	0.483	
32	8																												18.81	3.37	0.185	0.009	0.491	
33	9																												18.83	3.39	0.184	0.008	0.500	
34	9																												18.83	3.39	0.184	0.008	0.508	
35	7																												18.90	3.46	0.177	0.008	0.516	
36	6																												18.92	3.48	0.176	0.008	0.524	
37	6																												18.95	3.51	0.173	0.008	0.532	
38	7																												18.96	3.52	0.172	0.008	0.540	
39	7																												18.99	3.55	0.170	0.008	0.548	
40	8																												19.00	3.55	0.169	0.008	0.556	
41	8																												19.06	3.62	0.164	0.008	0.563	
42	5																												19.09	3.65	0.161	0.007	0.571	
43	7																												19.18	3.74	0.154	0.007	0.578	

44	7										19.27	3.83	0.148	0.007	0.585
45	8										19.28	3.84	0.147	0.007	0.592
46	7										19.41	3.97	0.137	0.006	0.598
47	7										19.53	4.09	0.130	0.006	0.604
48	5										19.56	4.12	0.127	0.006	0.610
49	6										19.59	4.15	0.125	0.006	0.615
50	6										19.61	4.17	0.125	0.006	0.621

model average															
β	0.01	-0.01	0.09	0.02	0.01	0.05		0.00	0.03	0.00	0.08				
variance	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00				
relative															
importance	0.27	0.27	1.00	0.65	0.40	1.00		0.21	0.73	0.19	1.00				
95% CI	0.03	0.02	0.04	0.05	0.03	0.04		0.01	0.05	0.01	0.03				

Table S3.71. Corn Bunting summer incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights			
1	7																													20.85	0.00	1.000	0.734	0.734			
model average																																					
	β						0.69		-1.40							0.96																					
	variance						0.06		0.54							0.11																					
	relative importance						1.00		1.00							1.00																					
	95% CI						0.47		1.47							0.66																					

Table S3.72. Corn Bunting winter incidence

Land-cover buffer scale: 0.5 km

model no.	K	artificial land-cover	arable land-cover	cereal	tilled	fallow	horticulture	grassland land-cover	fruit tree land-cover	groves	olive	carob	citrus	almond & other fruit	vineyard land-cover	active viticulture	abandoned viticulture	boundary features	complex agriculture	scrub land-cover	scrub habitat	tree density	forest land-cover	forest habitat	unvegetated land	elevation	habitat diversity	spatial autocovariate	intercept	AICc	Δ AICc	Relative likelihood	Akaike weights	Cumulative Akaike Weights		
1	5																												252.84	0.00	1.000	0.079	0.079			
2	6																													253.53	0.69	0.707	0.056	0.135		
3	6																													253.97	1.13	0.567	0.045	0.179		
4	6																													254.37	1.53	0.466	0.037	0.216		
5	7																													254.49	1.65	0.438	0.034	0.250		
6	5																													254.68	1.84	0.398	0.031	0.282		
7	6																													254.84	2.00	0.368	0.029	0.311		
8	7																													254.87	2.03	0.362	0.028	0.339		
9	4																													254.89	2.05	0.360	0.028	0.368		
10	7																													255.07	2.23	0.328	0.026	0.393		
11	5																													255.23	2.39	0.303	0.024	0.417		
12	8																													255.25	2.41	0.300	0.024	0.441		
13	7																													255.52	2.68	0.262	0.021	0.462		
14	4																													255.56	2.72	0.257	0.020	0.482		
15	6																													255.83	2.99	0.224	0.018	0.499		
16	7																													255.97	3.13	0.209	0.016	0.516		
17	6																													256.00	3.16	0.206	0.016	0.532		
18	6																													256.19	3.35	0.187	0.015	0.547		
19	5																													256.26	3.42	0.181	0.014	0.561		
20	4																													256.34	3.50	0.174	0.014	0.575		
21	7																													256.37	3.53	0.172	0.014	0.588		
22	5																													256.44	3.60	0.165	0.013	0.601		
23	8																													256.47	3.63	0.163	0.013	0.614		
24	6																													256.58	3.74	0.154	0.012	0.626		
25	5																													256.60	3.76	0.153	0.012	0.638		
26	7																													256.61	3.77	0.152	0.012	0.650		
27	6																													256.62	3.78	0.151	0.012	0.662		
28	5																													256.75	3.91	0.142	0.011	0.674		
29	5																													256.84	4.00	0.136	0.011	0.684		
30	8																													256.85	4.01	0.134	0.011	0.695		
31	5																													256.93	4.09	0.129	0.010	0.705		
model average																																				
β		-0.06											-0.05	0.01	-0.01																				0.32	
variance		0.00											0.00	0.00	0.00																				0.00	
relative																																				
importance		0.86											0.73	0.31	0.34																				1.00	
95% CI		0.07											0.08	0.03	0.04																				0.06	