

Table A1.1: Effect sizes and model results.

Index	Study	Year	Species	Group	Total birds	Altitude Disturbed	Altitude flown (m)	Altitude ES ⁺	SE ⁺	LCI [§]	UCI	
1	Overall Random Effects Model (Overall model)											
2	<50 m (Altitude moderator model)											
3	>50 m (Altitude moderator model)											
4	Ground Colonial (Nesting traits moderator model)											
5	Ground Solitary (Nesting traits moderator model)											
6	Non-Ground Colonial (Nesting traits moderator model)											
7	Non-Ground Solitary (Nesting traits moderator model)											
8	Afán et al.	2018	Glossy Ibis (<i>Plegadis falcinellus</i>)	Non-Ground Colonial	7134	0	50	≤50 m	-9.57	2.00	-12.34	-6.79
9	Barr et al.	2020	Waterbirds (<i>Leucophaeus atricilla</i> , <i>Eudocimus albus</i> , <i>Thalasseus maximus</i> , <i>Platalea ajaja</i> , <i>Egretta rufescens</i> , <i>Ardea alba</i> , <i>Rynchops niger</i> , <i>Egretta thula</i> , <i>Ardea herodias</i>)	Ground Colonial	510	128	46	≤50 m	-1.09	0.01	-1.29	-0.89
10	Bevan et al.	2018	Crested Tern (<i>Thalasseus bergii</i>)	Ground Colonial	926	285	50, 45, 40	≤50 m	-0.81	0.01	-0.95	-0.67

11	Bushaw et al.	2020	Waterfowl (<i>Aythya valisineria</i> , <i>Aythya americana</i> , <i>Aythya collaris</i> , <i>Aythya affinis</i> , <i>Oxyura jamaicensis</i> , <i>Anas platyrhynchos</i>)	Non-Ground Solitary	118	24	31, 5	≤50 m	-1.35	0.05	-1.79	-0.91
12	Fudala and Bialik	2022	Southern Giant Petrel (<i>Macronectes giganteus</i>)	Ground Colonial	137	2	50, 30	≤50 m	-3.99	0.41	-5.24	-2.74
13	Gallego and Sarasola	2021	Chaco Eagle (<i>Buteogallus coronatus</i>)	Non-Ground Solitary	48	1	5-10	≤50 m	-3.46	0.69	-5.08	-1.83
14	Junda et al.	2016	Osprey (<i>Pandion haliaetus</i>)	Non-Ground Solitary	88	88	3	≤50 m	5.18	2.01	2.40	7.96
15	Junda et al.	2016	Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Non-Ground Solitary	16	16	3-6	≤50 m	3.50	2.06	0.68	6.31
16	Junda et al.	2016	Ferruginous Hawk (<i>Buteo regalis</i>)	Non-Ground Solitary	22	22	3-6	≤50 m	3.81	2.04	1.00	6.61
17	Junda et al.	2016	Red-tailed Hawk (<i>Buteo jamaicensis</i>)	Non-Ground Solitary	10	10	3-6	≤50 m	3.04	2.10	0.21	5.88
18	Lachman et al.	2020	Western Grebe (<i>Aechmophorus occidentalis</i>)	Non-Ground Colonial	1059	0	50-10	≤50 m	-7.66	2.00	-10.43	-4.89
19	McKellar et al.	2020	Franklin's Gull (<i>Leucophaeus pipixcan</i>)	Non-Ground Solitary	152	105	45	≤50 m	0.80	0.03	0.46	1.14

20	McKellar et al.	2020	Black Tern (<i>Chlidonias niger</i>)	Non-Ground Solitary	12	5	45	≤50 m	-0.31	0.32	-1.41	0.79
21	Mesquita et al.	2020	Swifts (<i>Cypseloides senex</i> , <i>Streptoprocne zonaris</i>)	Non-Ground Colonial	12000	8550	50, 47.17, 43.01, 29.15, 26.93, 25.50, 25	≤50 m	0.91	0.00	0.87	0.95
22	Ryckman et al.	2022	Blue-wing Teal (<i>Spatula discors</i>)	Ground Colonial	2197	871	45	≤50 m	-0.42	0.00	-0.51	-0.33
23	Ryckman et al.	2022	Northern Shoveler (<i>Spatula clypeata</i>)	Ground Colonial	871	429	45	≤50 m	-0.03	0.00	-0.16	0.10
24	Scholten et al.	2020	Tree Swallow (<i>Tachycineta bicolor</i>)	Non-Ground Colonial	42	42	1.5	≤50 m	4.44	2.02	1.65	7.23
25	Shewring and Vafidis	2021	European Nightjar (<i>Caprimulgus europaeus</i>)	Ground Solitary	5	0	50-5	≤50 m	-2.40	2.18	-5.29	0.50
26	Valle and Scarton	2020	Redshank (<i>Tringa totanus</i>)	Ground Solitary	198	198	10	≤50 m	5.98	2.01	3.21	8.76
27	Weimerskirch et al.	2018	Seabirds (<i>Aptenodytes patagonicus</i> , <i>Eudyptes chrysolophus</i> , <i>E. chrysochome</i> , <i>Pygoscelis papua</i> , <i>Diomedea exulans</i> , <i>Phoebastria fusca</i> , <i>P. palpebrata</i> , <i>Macronectes giganteus</i> , <i>M. halli</i> , <i>Leucocarbo</i>)	Ground Colonial	324	0	50, 25, 10, 10-3	≤50 m	-6.66	2.00	-9.43	-3.88

			<i>atriceps,</i> <i>Stercorarius antarcticus)</i>									
28	Wen et al.	2021	Siberian Crane (<i>Grus leucogeranus</i>)	Ground Solitary	71	0	50	≤50 m	-4.96	2.01	-7.74	-2.18
29	Zbyryt et al.	2021	White Stork (<i>Ciconia ciconia</i>)	Non-Ground Solitary	101	83	20-1	≤50 m	1.51	0.07	1.00	2.01
30	Barr et al.	2020	Waterbirds (<i>Leucophaeus atricilla,</i> <i>Eudocimus albus,</i> <i>Thalasseus maximus, Platalea ajaja, Egretta rufescens, Ardea alba, Rynchops niger, Egretta thula, Ardea herodias</i>)	Ground Colonial	510	99	122, 91, 61	>50 m	-1.42	0.01	-1.64	-1.20
31	Bevan et al.	2018	Crested Tern (<i>Thalasseus bergii</i>)	Ground Colonial	455	5	70, 60	>50 m	-4.41	0.18	-5.25	-3.56
32	Fudala and Bialik	2022	Southern Giant Petrel (<i>Macronectes giganteus</i>)	Ground Colonial	130	5	70, 100, 130, 200	>50 m	-3.13	0.19	-3.98	-2.27
33	Lachman et al.	2020	Western Grebe (<i>Aechmophorus occidentalis</i>)	Non-Ground Colonial	1059	0	60-51	>50 m	-7.66	2.00	-10.43	-4.89
34	McKellar et al.	2020	Western Grebe (<i>Aechmophorus occidentalis</i>)	Non-Ground Colonial	113	44	60	>50 m	-0.45	0.04	-0.82	-0.07

35	McKellar et al.	2020	Franklin's Gull (<i>leucophaeus pipixcan</i>)	Non-Ground Solitary	3803	665	60, 120	>50 m	-1.55	0.00	-1.63	-1.47
36	Mesquita et al.	2020	Swifts (<i>Cypseloides senex</i> , <i>Streptoprocne zonaris</i>)	Non-Ground Colonial	10500	881	64.03, 61.03, 52.20, 50.99, 50.25	>50 m	-2.39	0.00	-2.46	-2.32
37	Weimerskirch et al.	2018	Seabirds (<i>Aptenodytes patagonicus</i> , <i>Eudyptes chrysolophus</i> , <i>E. chrysochome</i> , <i>Pygoscelis papua</i> , <i>Diomedea exulans</i> , <i>Phoebetria fusca</i> , <i>P. palpebrate</i> , <i>Macronectes giganteus</i> , <i>M. halli</i> , <i>Leucocarbo atriceps</i> , <i>Stercorarius antarcticus</i>)	Ground Colonial	324	0	>50	>50 m	-2.75	0.05	-3.16	-2.33
38	Wen et al.	2021	Siberian Crane (<i>Grus leucogeranus</i>)	Ground Solitary	71	0	150, 100	>50 m	-4.96	2.01	-7.74	-2.18

[†]ES = effect size (log odds); [‡]SE = standard error; [§]LCI = lower confidence interval (95%); ^{||}UCI = upper confidence interval (95%)