Dataset	Type	Records	Sites	Spatial extent (°)	Temporal extent (yr)
A	Flock counts	7,149	123	4.0 - 8.8 E, 51.1 - 53.4 N	2000 - 2017
В	Family counts	51,037	65	4.8 - 7.3 E, 51.1 - 53.4 N	2000 - 2017
$\mathbf{C}$	Marked geese	10,635	8,416	2.7 - 9.7 E, 50.9 - 53.9 N	2000 - 2017
D	Family counts	116	26	49 E, 69 N	2016
$\mathbf{E}$	Family GPS tracks	$13^{\rm a};\ 32,630^{\rm b}$	32,630	3.9 - 7.9 E, 51.3 - 54.3 N	$2013^{c}, 2014^{d}, 2016^{e}$

a: Number of families, b: Number of half hourly positions, c: 3 families, d: 4 families, e: 5 families

Model	Type	Dataset	Response	Fixed effects	Random effects	Records used	Cohen's $f^2$
1	$\operatorname{GLMM}$	В	6	1, 5	8, 9, 10	$20,160^{\rm a}; 14,018^{\rm b}$	$3.22^{a}; 4.74$
1	$\operatorname{GLMM}$	$\mathbf{C}$	6	1, 5	8, 11	$3,289^{\rm a}; 7,320^{\rm b}$	$4.87^{a}; 4.43$
2.a	$\operatorname{GLMM}$	В	1	3, 5, 7	8, 9, 10	34,179	0.09
2.a	$\operatorname{GLMM}$	$\mathbf{C}$	1	5, 7	8, 11	10,426	$7.72^{\circ}; 0.62^{\circ}$
2.b	GAMM	A	2	3, 5, 7	8, 9, 10	837	9.36
3	$\operatorname{GLMM}$	A	3	5, 6, 7	8, 9, 10	5,700	0.199
4	GAMM	A	4	5, 6, 7	8, 9, 10	5,659	0.52

Terms: 1: Number of juveniles per family, 2: Number of families, 3: Flock size,

- 4: Proportion of juveniles, 5: Days since autumn arrival,
- 6: Distance to breeding grounds, 7: Predation index, 8: Breeding year,
- 9 Observer, 10: Habitat type, 11: Goose identity

 $a: \leq 60$  days after arrival,  $b: \geq 60$  days after arrival, c: All families, d: Only successful families

Table 1: some caption

Model	Type	Response	Fixed effects	Random effects	Records used	Effect size
5.a	$\operatorname{GLMM}$	1	2, 3, 4, 5, 6, 7	9	$1,009^{a}$	0.08
$5.\mathrm{b}$	$\operatorname{GLMM}$	1	3, 8	9	$21,271^{\rm b}$	0.0004

Terms: 1: Split occurrence, 2: Family size, 3: Days since autumn arrival,

- 4: Daily number of flights, 5: Cumulative number of previous flights,
- 6: Daily distance travelled, 7: Cumulative distance previously travelled,
- 8: Time since last take-off, 9: Family identity

a: Daily positions, b: Half-hourly positions