

Debeffe, L., Morellet, N., Verheyden-Tixier, H., Hoste, H., Gaillard, J.-M., Cargnelutti, B., Picot, D., Sevila, J. and Hewison, A. J. M. 2014. Parasite abundance contributes to condition-dependent dispersal in a wild population of large herbivore. – *Oikos* doi: 10.1111/oik.01396

Appendix 1

Table A1. Performance of the five candidate generalized mixed linear models of dispersal propensity, distance and departure date, including landscape sector as a random factor.

‘NematodesStd’ refers to the standardised nematode abundance. Body mass (‘BM’) was included in the models as a continuous variable. The best models occur in bold. *k* refers to the number of model parameters.

Dispersal behaviour model	k	Propensity (n = 67)			Distance (n = 31)			Departure date (n = 31)		
		AICc	ΔAICc	AICcWt	AICc	ΔAICc	AICcWt	AICc	ΔAICc	AICcWt
NematodesStd × BM	5	87.8	0.00	0.66	95.77	3.52	0.11	256.11	4.92	0.05
NematodesStd + BM	4	92.84	5.09	0.05	95.06	2.82	0.16	253.69	2.50	0.16
NematodesStd	3	97.85	10.1	0.00	99.17	6.93	0.02	251.19	0.00	0.57
BM	3	91.4	3.65	0.11	92.25	0.00	0.66	254.85	3.65	0.09
Constant	2	96.19	8.44	0.01	97.91	5.66	0.04	254.16	2.97	0.13

Table A2. Parameter estimates from the best generalized linear mixed model describing variation in dispersal propensity as a function of body mass and nematode abundance (n = 67). ‘NematodesStd’ refers to the standardised nematode abundance. Body mass (‘BM’) was included as a continuous variable.

	Coefficient	Se	Z-value	Pr (> z)
Intercept	−6.8877	2.769	−2.487	0.0129
NematodesStd	5.2475	2.4523	2.14	0.0324
BM	0.4182	0.1703	2.455	0.0141
NematodesStd : BM	−0.3376	0.1513	−2.232	0.0256

Figure A1. Influence of the two-way interaction between nematode abundance and individual body mass on dispersal propensity (n = 67) with body mass included as a continuous variable. Isoclines and grey shading on the 3D plot represent the associated dispersal probability. Light grey indicates low dispersal probability while dark grey indicates high dispersal probability (ANOVA between best model and constant model: $\chi^2_3 = 15.23$; p = 0.0016)

