

Additional file 5

Dependent variable	N	Transformation	Model complexity	Fixed factors	Random effects	AIC
Diurnality	30		Full	Light * Species + Boldness	Population/ID	-1
			Minimal	Light + Species + Boldness	Population /ID	-3
Home range (95 % kernel)	60	Log	Full	Light * Daytime + Light * Boldness + Species	Population /ID	116
			Minimal	Light * Daytime + Boldness + Species	Population /ID	114
Home range overlap	240		Full	Light * Species combination + Light * Daytime + Light * Boldness1 * Boldness2	ID1 + ID2 + Population	28
			Minimal	Light * Species combination + Light * Daytime + Boldness 1 * Boldness2	ID1 + ID2 + Population	23
Proximity 5m	120	Log	Full	Light * Species combination + Light * Daytime + Boldness1 * Boldness2	ID1 + ID2 + Population	457
			Minimal	Light * Species combination + Daytime + Boldness1 * Boldness2	ID1 + ID2 + Population	455
Proximity 6m	120	Log	Full	Light * Species combination + Light * Daytime + Boldness1 * Boldness2	ID1 + ID2 + Population	463
			Minimal	Light * Species combination + Daytime + Boldness1 * Boldness2	ID1 + ID2 + Population	461
Proximity 7m	120	Log	Full	Light * Species combination + Light * Daytime + Boldness1 * Boldness2	ID1 + ID2 + Population	465
			Minimal	Light * Species combination + Daytime + Boldness1 * Boldness2	ID1 + ID2 + Population	463
Activity synchrony	60		Full	Light * Species combination + Boldness1 * Boldness 2	ID1 + ID2 + Population	-93

Minimal

Light * Species combination

ID1 + ID2 + Population

-97
