

Table S1. Top five multiple linear regression models for predicting the response of time spent aerial prospecting (square root transformed) based on an exhaustive model search considering as predictors the treatments of call playback and decoys, site, average wind speed, maximum wind speed, all possible interactions (×) between the treatments and site, and interactions between site and average wind speed and site and maximum wind speed. Models are selected based on the criterion of minimising AIC<sub>c</sub>, and only terms present in the top five models are shown in the table. Terms present in a particular model are denoted by a ‘■’. ( $n = 36$ ).

Model	Call Playback	Decoys	Site (Mandurah)	Maximum Wind	Average Wind	Call Playback × Site (Mandurah)	Maximum Wind × Site (Mandurah)
Model 1	■		■	■		■	■
Model 2	■	■	■	■		■	■
Model 3	■		■	■			■
Model 4	■		■	■	■	■	■
Model 5	■	■	■	■			■

Table S2. Model selection table for the top five multiple linear regression models for predicting the response of time spent aerial prospecting (square root transformed). The number of estimated parameters ( $k$ ), AIC<sub>c</sub>,  $\Delta$  AIC<sub>c</sub>, Akaike weight, and log-likelihood for each model are presented.

Model	$k$	AIC <sub>c</sub>	$\Delta$ AIC <sub>c</sub>	Weight	Log-likelihood
Model 1	7	269.47	0.00	0.37	-125.73
Model 2	8	269.81	0.34	0.32	-124.24
Model 3	6	271.96	2.49	0.11	-128.53
Model 4	8	271.97	2.50	0.11	-125.32
Model 5	7	272.21	2.74	0.10	-127.11

Table S3. Top five multiple linear regression models for predicting the response of maximum number of birds aerial prospecting as based on an exhaustive model search considering as predictors the treatments of call playback and decoys, site, average wind speed, maximum wind speed, all possible interactions (×) between the treatments and site, and interactions between site and average wind speed and site and maximum wind speed. Models are selected based on the criterion of minimising AIC<sub>c</sub>, and only terms present in the top five models are shown in the table. Terms present in a particular model are denoted by a ‘■’. ( $n = 36$ ).

Model	Call Playback	Decoys	Site (Mandurah)	Maximum Wind	Average Wind	Call Playback × Site (Mandurah)	Average Wind × Site (Mandurah)
Model 1	■		■		■	■	■
Model 2			■		■		■
Model 3	■		■		■		■
Model 4			■	■	■		■
Model 5	■	■	■		■	■	■

Table S4. Model selection table for the top five multiple linear regression models for predicting the response of maximum number of birds aerial prospecting. The number of estimated parameters ( $k$ ),  $AIC_c$ ,  $\Delta AIC_c$ , Akaike weight, and log-likelihood for each model are presented.

<b>Model</b>	<b><math>k</math></b>	<b><math>AIC_c</math></b>	<b><math>\Delta AIC_c</math></b>	<b>Weight</b>	<b>Log-likelihood</b>
Model 1	7	180.12	0.00	0.35	-81.06
Model 2	5	180.71	0.59	0.26	-84.35
Model 3	6	181.25	1.13	0.20	-83.18
Model 4	6	182.40	2.28	0.11	-83.75
Model 5	8	182.90	2.78	0.09	-80.79