NESTING SUCCESS AND NEST-SITE SELECTION OF WHITE-RUMPED VULTURES (*GYPS BENGALENSIS*) IN WESTERN MAHARASHTRA, INDIA.

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SUPPLEMENTAL MATERIALS

Figure 1. Nest counts from both colonies from their point of discovery to either failure or fledging, segregated according to the status.

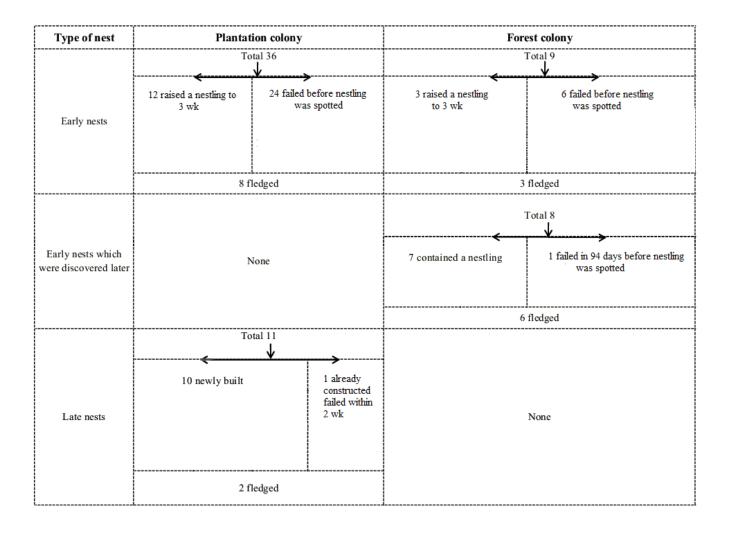| Type of nest	Plantation colony	Forest colony
Early nests	Total 36	Total 9
	12 raised a nestling to 3 wk 24 failed before nestling was spotted	3 raised a nestling to 3 wk 6 failed before nestling was spotted
	8 fledged	3 fledged
Early nests which were discovered later	None	Total 8
		7 contained a nestling 1 failed in 94 days before nestling was spotted
		6 fledged
Late nests	Total 11	None
	10 newly built 1 already constructed failed within 2 wk	
	2 fledged	

Table 1. List of models run under the selection process to examine the influence of variables (Table 1 and 2 in the manuscript) on the probability of successful nesting in the plantation colony. The coefficient estimates under every variable have been presented with the associated standard error in brackets. (Variables: Dist con=Distance to construction; Dist edge=Distance to edge; Dist house=Distance to house; Dist NN=Distance to nearest neighbour; Distroad=Distance to road; Leaf count=Lower canopy leaf count; Tall prop=Proportion of tall trees in a 10m radius; Tree count=Tree count at 10m).

Model	Intercept	Dist Con	Dist Edge	Dist House	Dist NN	Dist Road	GBH	Height	Leaf Count	Tall Prop	Tree Count	df	LogLik	AICc	Delta	Weight
Height, Tree count	-2.45 (0.78)	-	-	-	-	-	-	1.34 (0.77)	-	-	-0.68 (0.37)	3	-20.52	47.59	0	0.21
Tree count	-1.45 0.40)	-	-	-	-	-	-	-	-	-	-0.74 (0.37)	2	-22.34	48.94	1.36	0.10
Height	-2.39 (0.76)	-	-	-	-	-	-	1.35 (0.73)	-	-	-	2	-22.50	49.25	1.68	0.09
Tree count, Dist road	-1.48 (0.40)	-	-	-	-	0.43 (0.33)	-	-	-	-	-0.79 (0.39)	3	-21.46	49.48	1.88	0.08
Height, Tree count, Distroad	-2.34 (0.79)	-	-	-	-	0.24 (0.35)	-	1.17 (0.81)	-	-	-0.71 (0.38)	4	-20.29	49.50	1.91	0.08
Height, Dist house, Tree count	-2.53 (0.81)	-	-	-0.18 (0.40)	-	-	-	1.43 (0.80)	-	-	-0.66 (0.37)	4	-20.41	49.77	2.18	0.07
⸢Height, Disthouse, Distroad, Tree count	-2.61 (0.86)	-	-	-1.0 (0.86)	-	0.85 (0.67)	-	1.25 (0.82)	-	-	-0.68 (0.39)	5	-19.35	50.14	2.56	0.06
Tree count, Dist road, Dist house	-1.66 (0.48)	-	-	-0.81 (0.75)	-	0.97 (0.97)	-	-	-	-	-0.76 (0.39)	4	-20.67	50.28	2.70	0.05
Height, Disthouse	-2.48 (0.77)	-	-	-0.29 (0.40)	-	-	-	1.46 (0.76)	-	-	-	3	-22.2117	50.97	3.38	0.04
Null model	-1.34 (0.35)	-	-	-	-	-	-	-	-	-	-	1	-24.5635	51.21	3.63	0.03
Tree count, Disthouse	-1.45 (0.40)	-	-	0.02 (0.33)	-	-	-	-	-	-	-0.74 (0.38)	3	-22.335	51.21	3.63	0.03
Height, Distroad, Disthouse	-2.59 (0.82)	-	-	-1.02 (0.78)	-	0.77 (0.60)	-	1.35 (0.77)	-	-	-	4	-21.1453	51.22	3.64	0.03
Height, Distroad	-2.33 (0.77)	-	-	-	-	0.18 (0.33)	-	1.25 (0.76)	-	-	-	3	-22.352	51.25	3.66	0.03
Distroad	-1.39 (0.37)	-	-	-	-	0.36 (0.33)	-	-	-	-	-	2	-23.9378	52.14	4.56	0.02
Dist road, Disthouse	-1.55 (0.44)	-	-	-0.84 (0.69)	-	0.91 (0.59)	-	-	-	-	-	3	-22.9105	52.37	4.78	0.01
Disthouse	-1.34	-	-	-0.1	-	-	-	-	-	-	-	2	-24.5157	53.30	5.71	0.01

	(0.35)			(0.33)											
*Height, Treecount, Dist con, Dist edge, Disthouse, Dist NN, Distroad, GBH, Leaf count, Tall prop	-3.03 (1.17)	-0.34 0.70)	0.09 (0.64)	-1.11 (0.99)	0.66 (0.74)	1.2 (0.75)	-0.41 (0.44)	1.85 (0.10)	-0.27 (0.45)	-0.45 (0.91)	-0.75 (0.62)	11	-18.2586	65.85	18.27	0.00

*Global model with all variables;

† Simplified model after dropping predictors with low explanatory power from the global model

Table 2. List of models run under the generalized linear mixed model framework to examine the influence of variables on choice of nesting tree, where the response is binary (chosen or not) and the random effect is the set of four trees (one chosen and three matched trees that were not chosen). The coefficient estimates under every variable have been presented with the associated standard error in brackets. (Leafcount=Lower canopy leaf count; Tall prop=Proportion of tall trees in a 10-m radius; Tree count=Tree count at 10 m; Exposure= Percent exposure).

Model	Fixed Effect Estimates												Random Effect Intercept Variance (St Dev)
	Intercept	GBH	Leaf Count	Exposure	Height	Tall Prop	Tree Count	df	LogLik	AICc	Delta	Weight	
*Height, GBH, Leaf count, Tall prop, Tree count, Exposure	-19.9 (8.56)	19.07 (9.8)	18.03 (7.45)	23.06 (11.05)	39.05 (15.58)	0.4 (4.15)	22.45 (9.76)	8	-49.74	116.36	0	0.51	12603(112.3)
Height, GBH, Leaf count, Exposure	-16.25 (4.41)	18.05 (6.33)	13.41 (3.29)	5.44 (2.36)	29.91 (7.90)	-	-	6	-51.95	116.41	0.04	0.49	7313(85.51)
Height, Leaf count	-16.7 (17.2)	-	19.39 (20.1)	-	22.94 (9.42)	-	-	4	-66.19	140.62	24.26	0	2643(51.41)
Height, GBH, Leaf count	-19.29 (5.23)	18.42 (5.79)	13.78 (4.0)	-	31.1 (9.42)	-	-	5	-70.42	151.2	34.84	0	6252(79.07)
GBH	-8.59 (3.22)	11.93 (4.31)	-	-	-	-	-	3	-75.27	156.67	40.31	0	774.8(27.83)
Height	-1.41 (0.56)	-	-	-	1.93 (0.61)	-	-	3	-80.59	167.33	50.96	0	10.88(3.29)
Leaf count	-1.08 (1.07)	-	1.63 (0.81)	-	-	-	-	3	-84.22	174.59	58.23	0	35.66(5.97)
Tall prop	-1.25 (0.70)	-	-	-	-	-1.61 (0.77)	-	3	-84.81	175.76	59.4	0	16.96(4.11)
Height, GBH, Leaf.count, Tree count, Exposure	-6.48 (3.09)	12.61 (3.69)	9.91 (2.82)	14.49 (3.56)	19.66 (5.35)	-	14.97 (3.75)	7	-82.02	178.73	62.36	0	3925(62.65)
Exposure	-0.93 (0.86)	-	-	0.79 (0.57)	-	-	-	3	-87.72	181.57	65.21	0	26.25(5.12)
Tree count	-0.87 (0.80)	-	-	-	-	-	0.35 (0.55)	3	-88.7	183.55	67.19	0	23.77(4.87)

[*] Global model with all variables.

The coefficient estimates and the random effect variance estimates in Table 2 (above), even without a convergence error in R statistical software, seem extreme; hence, we have chosen not to present these in the main manuscript and retained the earlier bootstrapped means and associated confidence intervals (for difference between used and mean of unused).