

Posterior mean (SD), 95% CI and prior used of the parameter explaining bonobo occurrence probability ψ as estimated by model 1 “M1” integrating camera-traps data in the block south of Salonga National Park. Parameter are indexed by method (SCNC: Standing Crop Nest Counts; RECCES: Reconnaissance Walk; CTDS: Camera Trap Distance Sampling), by sub-sector (1: Iyaelima; 2: Lokofa; 3: Monkoto; 4: South-West) and by proximity to a ranger patrol post (yes: patrol post within 15 km; no: patrol post further than 15 km).

Parameter description	Parameter name and indexing	Prior	Mean (sd)	95% CI
Intercept of detection probability	α_{SCNC}		1.98 (0.59)	0.94 – 3.25
	α_{RECCES}		-0.18 (0.22)	-0.58 – -0.31
	α_{CTDS}		-0.47 (0.24)	-0.93 – 0.02
Varying intercept (by sub-sector) of occurrence probability	$\alpha 1_1$	<i>Normal(0,1.4)</i>	1.04 (0.66)	-0.21 – 2.28
	$\alpha 1_2$		-0.83 (0.76)	-2.34 – 0.66
	$\alpha 1_3$		-1.58 (0.71)	-3.08 – -0.20
	$\alpha 1_4$		-1.04 (0.66)	-2.34 – 0.29
Slope (fixed) of forest coverage <i>F</i>	$\beta 1$		0.63 (0.11)	0.41 - 0.85
Varying slope (by sub-sector and proximity to a patrol post) of distance to cities <i>C</i>	$\beta 2_{1,no}$		-0.11 (0.25)	-0.59 – 0.39
	$\beta 2_{1,yes}$		0.32 (0.31)	-0.29 – 0.95
	$\beta 2_{2,no}$		-0.29 (0.39)	-1.04 – 0.50
	$\beta 2_{2,yes}$		0.23 (0.42)	-0.54 – 1.07
	$\beta 2_{3,no}$		0.66 (0.31)	0.05 – 1.26
	$\beta 2_{3,yes}$		-0.30 (0.37)	-1.02 – 0.37
	$\beta 2_{4,no}$		-0.74 (0.35)	-1.43 – -0.03
	$\beta 2_{4,yes}$		0.11 (0.42)	-0.68 – 0.96
Varying slope (by sub-sector and proximity to a patrol post) of distance to villages <i>V</i>	$\beta 3_{1,no}$	<i>Normal(0,0.5)</i>	-0.37 (0.24)	-0.84 – 0.11
	$\beta 3_{1,yes}$		0.77 (0.30)	0.20 – 1.37
	$\beta 3_{2,no}$		-0.06 (0.39)	-0.83 – 0.65
	$\beta 3_{2,yes}$		-0.18 (0.39)	-0.95 – 0.61
	$\beta 3_{3,no}$		-0.01 (0.33)	-0.66 – 0.63
	$\beta 3_{3,yes}$		0.15 (0.47)	-0.79 – 1.06
	$\beta 3_{4,no}$		0.59 (0.22)	0.18 – 1.00
	$\beta 3_{4,yes}$	-0.22 (0.36)	-0.91 – 0.52	
Varying slope (by sub-sector and proximity to a patrol post) of distance to rivers <i>R</i>	$\beta 4_{1,no}$		0.20 (0.15)	-0.08 – 0.49
	$\beta 4_{1,yes}$		-0.31 (0.19)	-0.67 – 0.07
	$\beta 4_{2,no}$		0.09 (0.35)	-0.58 – 0.82
	$\beta 4_{2,yes}$		0.39 (0.38)	-0.38 – 1.15
	$\beta 4_{3,no}$		0.27 (0.25)	-0.24 – 0.73
	$\beta 4_{3,yes}$		0.02 (0.46)	-0.90 – 0.90
	$\beta 4_{4,no}$		-0.24 (0.21)	-0.70 – 0.13
	$\beta 4_{4,yes}$	0.29 (0.31)	-0.33 – 0.88	
Varying intercept of proximity to patrol post <i>K</i>	$\beta 5_{no}$	<i>Normal(0,1.4)</i>	-1.66 (0.61)	-2.88 – -0.44
	$\beta 5_{yes}$		-0.77 (0.65)	-2.01 – 0.43