

Posterior mean (SD), 95% CI and prior used of the parameter explaining bonobo nest density μ and the probability of founding nests on a transect ϕ 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 |
|---|-----------------------------|-----------------------|--------------|--------------|
| Probability of founding bonobos/bonobo signs on transect (by method) | ϕ_{SCNC} | <i>Beta(2,2)</i> | 0.42 (0.04) | 0.35 – 0.49 |
| | ϕ_{CTDS} | | 0.23 (0.03) | 0.17 – 0.29 |
| Varying intercept (by sector and method) of mean density | $\alpha_{2, SCNC}$ | | 1.66 (2.02) | -2.24 – 5.68 |
| | $\alpha_{2, CTDS}$ | | 0.08 (2.01) | -3.69 – 3.95 |
| | $\alpha_{2, SCNC}$ | | 1.49 (2.05) | -2.58 – 5.35 |
| | $\alpha_{2, CTDS}$ | | 0.75 (2.04) | -3.08 – 4.49 |
| | $\alpha_{3, SCNC}$ | | 1.80 (2.05) | -2.14 – 5.77 |
| | $\alpha_{3, CTDS}$ | | 0.50 (2.04) | -3.43 – 4.31 |
| | $\alpha_{4, SCNC}$ | | 1.44 (2.03) | -2.55 – 5.36 |
| | $\alpha_{4, CTDS}$ | | 0.02 (2.03) | -3.87 – 3.99 |
| Varying slope (by method) of forest coverage <i>F</i> | $\gamma_{1 SCNC}$ | | 0.12 (0.13) | -0.14 – 0.37 |
| | $\gamma_{1 CTDS}$ | | 0.11 (0.20) | -0.28 – 0.52 |
| Varying slope (by method) of distance to cities <i>C</i> | $\gamma_{2 SCNC}$ | | -0.04 (0.15) | -0.35 – 0.25 |
| | $\gamma_{2 CTDS}$ | | -0.18 (0.22) | -0.57 – 0.25 |
| Varying slope (by methods) of distance to villages <i>V</i> | $\gamma_{3 SCNC}$ | <i>Normal(0,0.5)</i> | -0.01 (0.17) | -0.34 – 0.31 |
| | $\gamma_{3 CTDS}$ | | 0.07 (0.20) | -0.33 – 0.46 |
| Varying slope (by method) of distance to rivers <i>R</i> | $\gamma_{4 SCNC}$ | | -0.06 (0.09) | -0.25 – 0.10 |
| | $\gamma_{4 CTDS}$ | | -0.08 (0.12) | -0.33 – 0.16 |
| Varying slope (by method) of human signs/ 100 m <i>H</i> | $\gamma_{5 SCNC}$ | | 0.00 (0.08) | -0.16 – 0.13 |
| | $\gamma_{5 CTDS}$ | | -0.14 (0.14) | -0.44 – 0.12 |
| Varying slope (by method) of proportion of bonobo feeding trees <i>T</i> | $\gamma_{6 SCNC}$ | | 0.01 (0.09) | -0.16 – 0.20 |
| | $\gamma_{6 CTDS}$ | | -0.16 (0.14) | -0.43 – 0.13 |
| Varying slope (by method) of proportion of <i>Marantaceae</i> <i>M</i> | $\gamma_{7 SCNC}$ | | 0.16 (0.11) | -0.05 – 0.36 |
| | $\gamma_{7 CTDS}$ | | -0.06 (0.15) | -0.33 – 0.24 |
| Varying slope (by method) of black mangabey density (monkeys/km ²) <i>B</i> | $\gamma_{8 SCNC}$ | | -0.02 (0.10) | -0.22 – 0.16 |
| | $\gamma_{8 CTDS}$ | | 0.04 (0.17) | -0.33 – 0.36 |
| Varying intercept (by method) of proximity to patrol post <i>K</i> | $\gamma_{9 SCNC, no}$ | <i>Normal(0,5)</i> | 3.56 (2.02) | -0.45 – 7.55 |
| | $\gamma_{9 SCNC, yes}$ | | 0.84 (2.01) | -3.11 – 4.75 |
| | $\gamma_{9 CTDS, no}$ | | 3.47 (2.02) | -0.49 – 7.44 |
| | $\gamma_{9 CTDS, yes}$ | | 0.63 (2.00) | -3.23 – 4.37 |
| Scale parameter (by method) | θ_{SCNC} | <i>Gamma(0.3,0.3)</i> | 0.01 (0.00) | 0.01 - 0.01 |
| | θ_{CTDS} | | 0.22 (0.05) | 0.14 - 0.30 |