Supplementary TABLE 1 Estimates of β-coefficient values (with standard errors) for individual covariates associated with detection probabilities p1 and p2. Two covariates *ndvi* and *distoforest* were modeled with global model Ψ1(*dog+goat+ndvi+river+distoforest*), Ψ2(*dog+goat+ndvi+river+distoforest*).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | *p1* (.) (SE) | *p1* distoforest (SE) | *p1* ndvi (SE) | *p2* (.)(SE) | *p2* distoforest (SE) | *p2* ndvi (SE) | δ (.) (SE)  |
| *p1*(.), *p2*(distoforest), δ(.) | -1.03 (0.37) |  |  | -0.025 (0.21) | -1.37 (0.27) |  | -0.12 (0.20) |
| *p1*(.), *p2*(ndvi+distoforest), δ(.) | -1.01 (0.38) |  |  | -0.06 (0.20) | -1.21 (0.27) | 0.33 (0.23) | -0.12 (0.21) |
| *p1*(distoforest), *p2*(.), δ(.) | -0.99 (0.33) | -0.14 (0.31) |  | 0.47 (0.17) |  |  | -0.12 (0.20) |
| *p1*(distoforest), *p2*(distoforest), δ(.) | -0.61 (0.43) | 1.04 (0.70) |  | -0.008 (0.19) | -1.37 (0.23) |  | -0.16 (0.20) |
| *p1*(disstoforest), *p2*(ndvi+distoforest), δ(.)  | -0.57 (0.44) | 1.11 (0.70) |  | -0.06 (0.19) | -1.18 (0.25) | 0.35 (0.22) | -0.17 (0.20) |
| *p1*(ndvi), *p2*(distoforest), δ(.) | -1.26 (0.47) |  | -0.53 (0.53) | -0.001 (0.19) | -1.38 (0.24) |  | -0.15 (0.20) |
| *p1*(ndvi+distoforest), *p2*(distoforest), δ(.) | -0.79 (0.65) | 0.85 (0.85) | -0.23 (0.62) | -0.005 (0.19) | -1.38 (0.23) |  | -0.16 (0.20) |
| *p1*(ndvi+distoforest), *p2*(ndvi+distoforest), δ(.) | -0.76 (0.66) | 0.91 (0.85) | -0.23 (0.62) | -0.05 (0.19) | -1.18 (0.25) | 0.36 (0.22) | -0.17 (0.20) |
| *p1*(.), *p2*(ndvi), δ(.)  | -1.57 (0.27) |  |  | 0.24 (0.21) |  | 0.78 (0.22) | -0.13 (0.21) |
| *p1*(ndvi), *p2*(ndvi), δ(.) | -0.87 (0.45) |  | 0.87 (0.52) | 0.24 (0.20) |  | 0.78 (0.21) | -0.12 (0.20) |
| *p1*(.), *p2*(.), δ(.) | -1.63 (0.24) |  |  | 0.56 (0.18) |  |  | -0.12 (0.20) |
| *p1*(ndvi), *p2*(.), δ(.) | -0.84 (0.49) |  | 1.09 (0.67) | 0.57 (0.18) |  |  | -0.13 (0.20) |
| *p1*(distoforest), *p2*(ndvi), δ(.) | -1.16 (0.35) | -0.41 (0.30) |  | 0.33 (0.22) |  | 0.77 (0.23) | -0.05 (0.22) |
| *p1*(ndvi+distforest), *p2*(.), δ(.) | -0.89 (0.50) | -0.13 (0.34) | 1.01 (0.68) | 0.57 (0.18) |  |  | -0.13 (0.20) |
| *p1*(ndvi+distoforest), *p2*(ndvi), δ(.) | -1.34 (0.40) | -0.51 (0.34) | -0.47 (0.44) | 0.31 (0.22) |  | 0.80 (0.23) | -0.07 (0.22) |

ndvi-vegetation cover; distoforest- distance to forest; goat-relative abundance of goat, dog-relative abundance of dog; river-length of river in each grid