

Supplementary material

APPENDIX 1

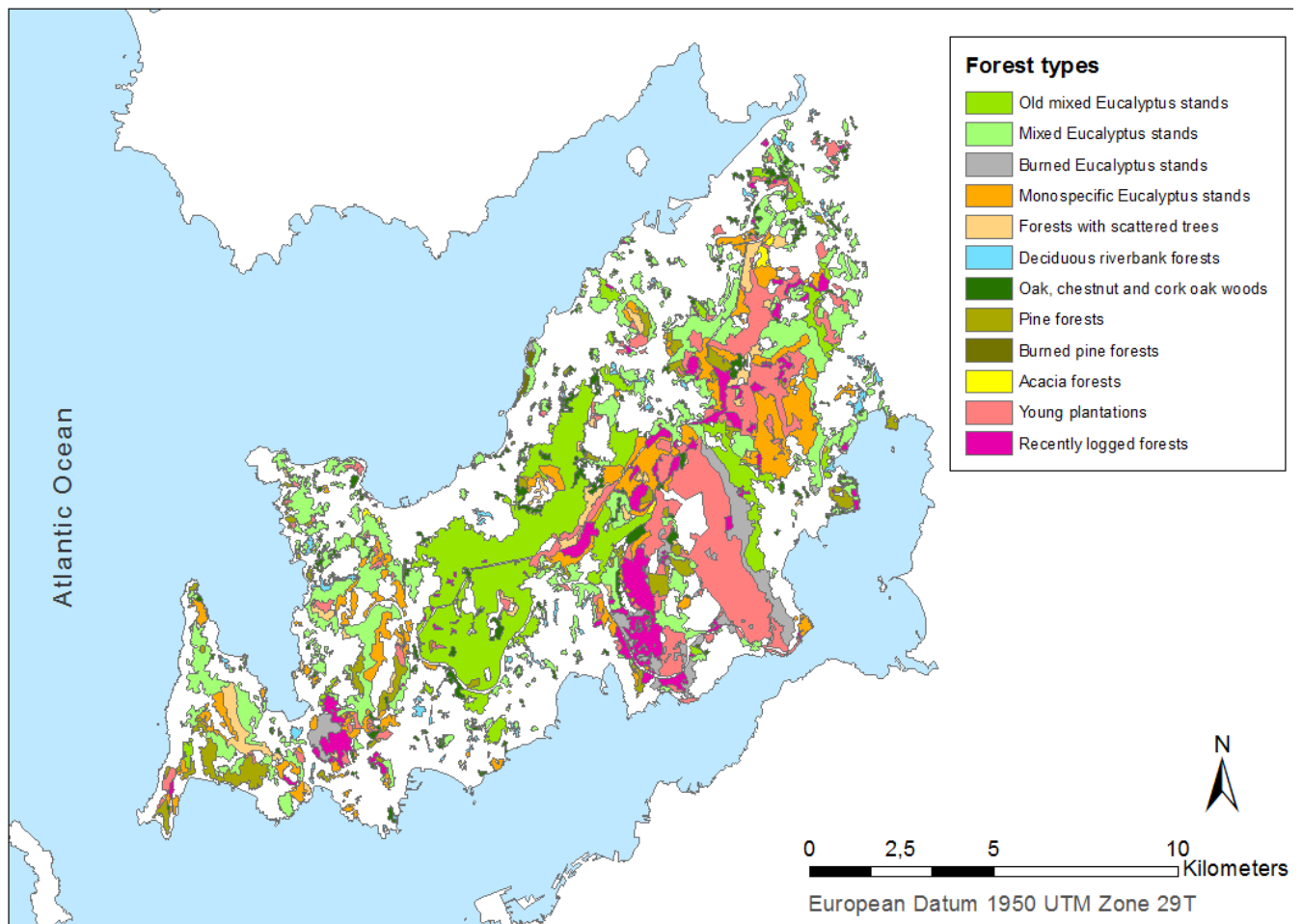


Figure A1. Different forest types in the Morrazo peninsula of northwestern Spain. The figure was prepared based on forest stand composition and structure determined from aerial photographs and confirmed by field visits. White areas are non-forest habitats.

Table A1. Results of generalized linear mixed models (GLMM) used to compare the second shortest distances between active nests with simulated second distances expected by chance for each pair of raptor species. The full model was considered more plausible than the null model when the AICc of the full model (AICc₁) was lower than that of the null model (AICc₀) by more than 6 points ($\Delta_i > 6$). Coefficients of the full model denote mean distances predicted by the model.

Interspecific 2nd distances	AICc₀	AICc₁	Δ_i	$\alpha \pm SE$	$\beta \pm SE$
Goshawk-Sparrowhawk	181244	181245	-1	2345.71 \pm 68.56	93.57 \pm 71.68
Sparrowhawk-Goshawk	244001	244003	-2	2593.65 \pm 22.5	-21.95 \pm 60.55
Goshawk-Buzzard	247181	247180	1	1937.49 \pm 27.73	89.26 \pm 57.42
Buzzard-Goshawk	420090	420092	-2	2451.42 \pm 18.66	19.92 \pm 44.97
Sparrowhawk-Buzzard	240709	240710	-1	1880.08 \pm 28.52	-54.70 \pm 51.02
Buzzard-Sparrowhawk	331760	331762	-2	2224.85 \pm 54.97	7.97 \pm 47.77

Note: AICc, Akaike Information Criterion modified for small sample sizes; AICc₀, AICc for null model; AICc₁, AICc for full model; $\Delta_i = AICc_0 - AICc_1$; α = mean of random distances predicted by the full model; β = mean difference between observed and random distances predicted by the full model.

Table A2. Results of generalized linear mixed models (GLMM) used to compare the third shortest distances between active nests with simulated third distances expected by chance for each pair of raptor species. The full model was considered more plausible than the null model when the AICc of the full model (AICc₁) was lower than that of the null model (AICc₀) by more than 6 points ($\Delta_i > 6$). Coefficients of the full model denote mean distances predicted by the model.

Interspecific 3rd distances	AICc₀	AICc₁	Δ_i	$\alpha \pm SE$	$\beta \pm SE$
Goshawk-Sparrowhawk	181862	181860	2	3148.57 \pm 63.61	135.58 \pm 73.87
Sparrowhawk-Goshawk	244681	244681	0	3466.13 \pm 27.36	100.86 \pm 64.41
Goshawk-Buzzard	248229	248227	2	2596.90 \pm 29.81	113.34 \pm 58.31
Buzzard-Goshawk	421301	421298	3	3306.97 \pm 21.61	99.85 \pm 46.81
Sparrowhawk-Buzzard	241235	241235	0	2477.85 \pm 30.35	-61.80 \pm 51.73
Buzzard-Sparrowhawk	332940	332942	-2	2981.09 \pm 52.50	24.92 \pm 49.28

Note: AICc, Akaike Information Criterion modified for small sample sizes; AICc₀, AICc for null model; AICc₁, AICc for full model; $\Delta_i = AICc_0 - AICc_1$; α = mean of random distances predicted by the full model; β = mean difference between observed and random distances predicted by the full model.