

10.1071/WR19114_AC

© CSIRO 2020

Supplementary Material: *Wildlife Research*, 2020, 47(6), 448-459.

Modelling the abundance and productivity distribution to understand the habitat–species relationship: the guanaco (*Lama guanicoe*) case study

Celina E. Flores^{A,F}, Laura M. Bellis^{B,C} and Schiavini Adrián^{A,D,E}

^ACentro Austral de Investigaciones Científicas (CADIC-CONICET), Bernardo Houssay 200, Ushuaia, V9410, Tierra del Fuego, Argentina.

^BInstituto de Altos Estudios Espaciales ‘Mario Gulich’ (CONAE-UNC), CONICET, Falda del Cañete, Ruta Provincial C45, CPA X5187XAC, Falda del Carmen, Córdoba, Argentina.

^CCátedra de Ecología de la Facultad de Ciencias Exactas Físicas y Naturales de la Universidad Nacional de Córdoba, Av. Velez Sarsfield 299, X5000 JJC, Córdoba, Argentina.

^DUniversidad Nacional de Tierra del Fuego Antártida e Islas del Atlántico Sur. Instituto de Ciencias Polares, Ambiente y Recursos Naturales. Fuegia Basket 251, Ushuaia, Tierra del Fuego, Argentina.

^EWildlife Conservation Society, Representación Argentina.

^FCorresponding author. Email: celiflores1@gmail.com

Table S1. Landsat images (L8 OLI/TIRS) used in supervised maximum-likelihood classification, extracted from Collection 1

Name	Date
LC82260982013117LGN01	27 Apr. 2013
LC82260982013325LGN00	21 Nov. 2013
LC82260982015043LGN00	12 Feb. 2015
LC82260982015107LGN00	17 Apr. 2015
LC82260982015283LGN00	10 Oct. 2015
LC82260982015315LGN00	11 Nov. 2015
LC82260982015283LGN00	10 Oct. 2015
<u>LC82260982015315LGN00</u>	<u>11 Nov. 2015</u>

Table S2. Correlation between covariates (anthropogenic and natural factors) modeled for breeding season in 2014

Spearman's rank correlation coefficients

P-values of Spearman's rank correlation coefficients

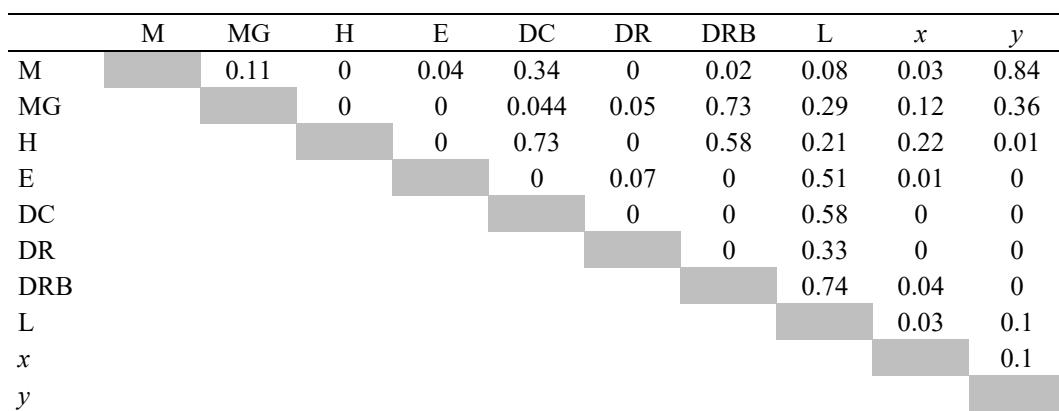


Table S3. Correlation between covariates (anthropogenic and natural factors) modeled for non-breeding season in 2014

Spearman's rank correlation coefficients

P-values of Spearman's rank correlation coefficients

Table S4. Correlation between covariates (anthropogenic and natural factors) modeled for breeding season in 2015

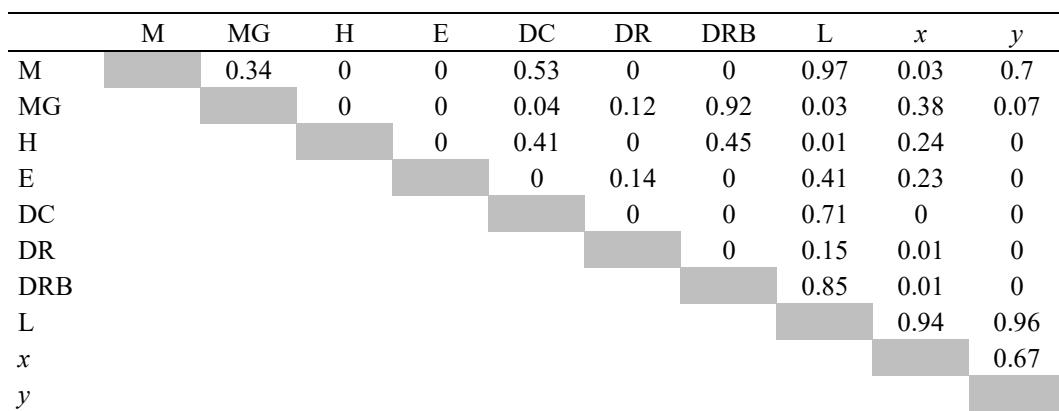
Spearman's rank correlation coefficients

P-values of Spearman's rank correlation coefficients

Table S5. Correlation between covariates (anthropogenic and natural factors) modeled for breeding season in 2015

Spearman's rank correlation coefficients

P-values of Spearman's rank correlation coefficients



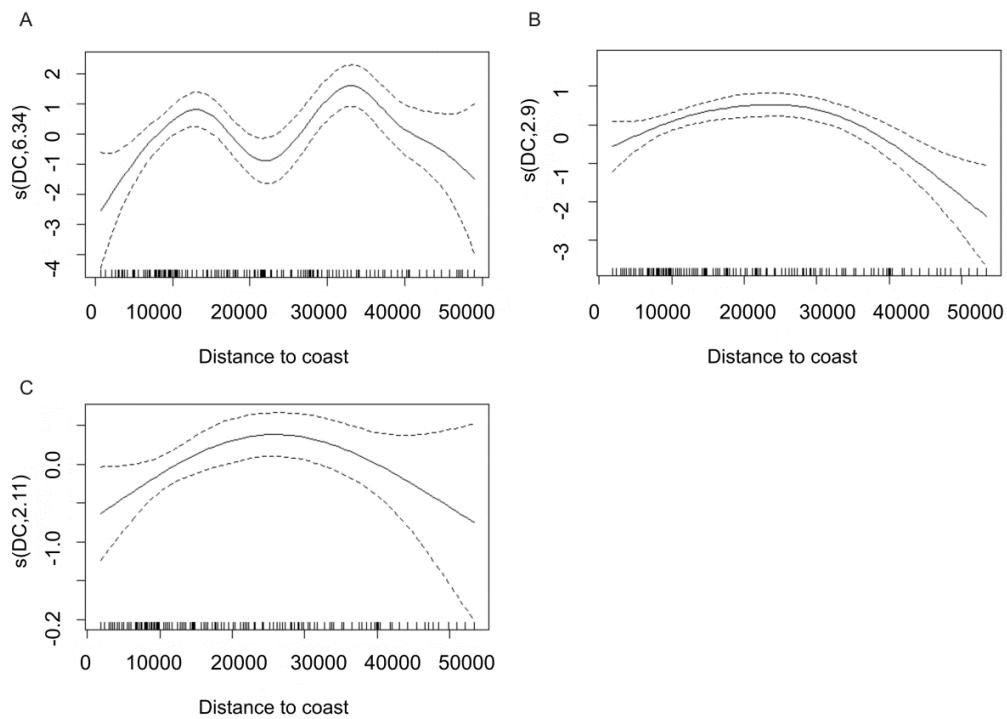


Fig. S1. Smooth functions of distance to coast (DC) for guanaco abundance (a) in non-breeding season in 2014, (b) in breeding season in 2015 and (c) for guanaco productivity in 2015. The estimated smooth terms (solid lines), the 95 % confidence intervals (dotted lines) and the estimated degrees of freedom for each smooth term (the number in parentheses for 's') are shown. The estimated smooth terms are expressed at the scale of the link function.

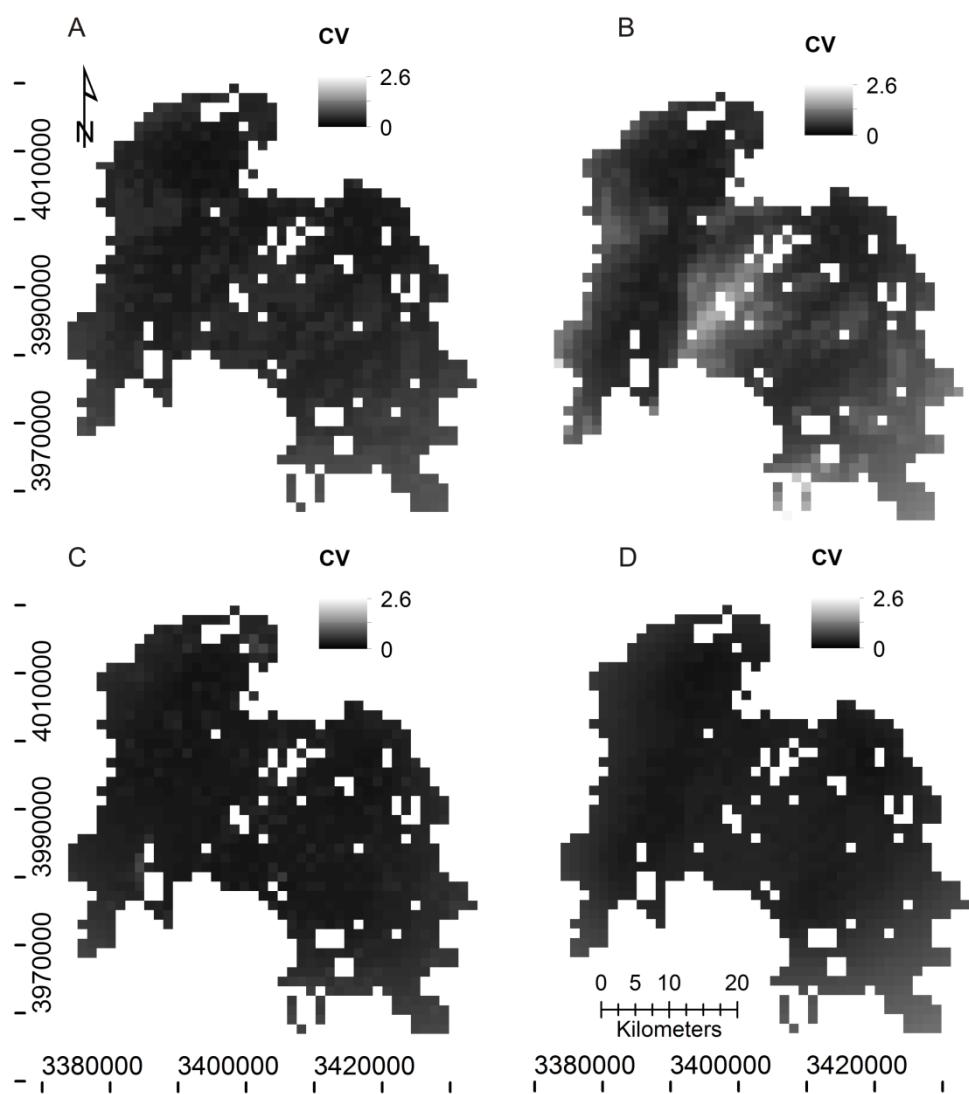


Fig. S2. Spatial distribution of coefficient of variation (1=100%) for guanaco abundance in the breeding season of (a) 2014 and (c) 2015, and non-breeding season of (b) 2014 (B) and (d) 2015. The geographical coordinates are expressed in metres.