**Sesión:**
1. Paisajes agrarios de los países ibéricos

**Tipo de contribución:**
Póster

**Contribución\*:**

**Are landscape attributes and climate good predictors for breeding success in agricultural landscapes? The case of great bustard** *(Otis tarda)*

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Breeding success is a critical parameter for species persistence that depends on a series of trade-offs and limitations which have evolutionary implications. Within a population, some individuals may obtain more energy than others, being therefore able to reproduce more successfully. These differences can be related to individual quality, age or experience and social constraints (e.g. reproductive skew), but also to environmental restrictions linked to spatial and temporal heterogeneity. We used species distribution modelling techniques to evaluate to what extent landscape attributes and climate drive breeding success of Great Bustard in Spain. We explored how methodological choices applied when defining the population parameter impact on the ecological inference of results. The nature of the negative cases used in model calibration was responsible for the main differences observed in model's performance, nature of contributing variables and spatial outputs. Models calibrated in potential distribution areas (nest site selection models) showed higher performance, were driven by predictors of more diverse nature and allowed for a better differentiation in spatial patterns of breeding habitat suitability than those calibrated in occupied breeding areas (breeding performance models). This could be associated with the fact that, when birds are looking for a nesting area, their decision is based on a wide survey of space, prospecting many interacting environmental and social "proximate cues" that reflect environmental conditions and resource availability. However, breeding performance also depend on other highly variable factors like differences in phenology or agricultural practices that result more difficult to identify within the current breeding distribution range.