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10th Conference of the European Ornithologist's Union 24-28 August 2015, Badajoz

Programme and Abstracts





Oral 1: Ecology

O.01 Daniela Campobello TUESDAY 25th August 15:30h AUDITORIO

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Interactive effects of micro- and macro-habitat features on reproductive success of lesser kestrels *Falco naumanni*

Abstract

Global warming effects and their interactions with other stressors have been examined at a macro- but not at a micro-scale. Across 2004-2013, we examined the potential interactive effect of ambient and nest temperatures on the reproductive performances of 1,157 nests of a cavity nester, the lesser kestrel *Falco naumanni*, breeding colonially in the Gela Plain (Sicily). By modeling temperatures on local (i.e. by weather stations) and micro (i.e. inside the nest) scales together with another set of biotic and abiotic variables, we found that local temperatures alone were the worst predictors of nest conditions whereas, together with the type of nest and brood days to a daily mean $\geq 38.9^{\circ}$ C) suffered decreased hatching and fledging success. The most successful breeders were those that prevented such an overheating by both occupying under-tile nests and laying small clutches. We discuss the role of these two abiotic (i.e. nest type) and biotic (i.e. brood size) variables representing selective pressure potentially able to shape behavioural and life history traits such as nest site preferences and clutch size, respectively.

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