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Programme and Abstracts

Oral 1: Ecology

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

Section Animal Biology, Dept. STEBICEF, University of Palermo, Via Archirafi 18, 90123 Palermo, Italy
danielacampobello@hotmail.com

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 ≥ 38.9° 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.

Joint authors

Jan Lindström: Institute of Biodiversity, Animal Health and Comparative Medicine, Graham Kerr building, University of Glasgow, Glasgow G12 8QQ, UK Jan.Lindstrom@glasgow.ac.uk,

Rosanna Di Maggio, Section Animal Biology, Dept. STEBICEF, University of Palermo, Via Archirafi 18, 90123 Palermo, Italy rosannadimaggio@gmail.com

Maurizio Sarà:, Section Animal Biology, Dept. STEBICEF, University of Palermo, Via Archirafi 18, 90123 Palermo, Italy, maurizio.sara@unipa.it