

EFFECTS OF ABIOTIC FACTORS ON EGGS' DIMENSIONS OF CORY'S SHEARWATER IN A SOUTHERN IONIAN COLONY

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Numerous studies of the factors affecting egg size in Procellariiformes have been conducted and have proved to be very informative about their breeding ecology. Here we present the first results concerning the correlations between abiotic factors (orientation of nest entrance, type of nest, humidity and temperature in the nest) with egg dimensions (length, width and weight) of Cory's Shearwaters (*Calonectris diomedea diomedea*) colony on Stamfani Island. Fieldwork was carried out in June 2011, during the early stages of laying so as to minimize the bias on the egg weight measurements. A total sample of 30 eggs laid in different sub-colonies of the island was examined; length, width and weight scores (mean \pm s.d.) were estimated at 6.75 ± 0.19 cm, 4.55 ± 0.14 cm and 76.40 ± 4.70 g, respectively. The aforementioned results enhance previous findings that support morphometric differences between the Atlantic and the Mediterranean Cory's Shearwater subspecies. In addition, significant correlations between weight and both egg length and width have been observed, but not between length and width. Moreover the study of possible effects of abiotic factors on egg dimensions revealed a significant negative correlation between temperature and both egg weight and width, whereas a significant positive correlation was found between humidity and egg width. No significant correlations between the egg dimensions and the nest type as well as the orientation of nest entrance were found, even when those abiotic factors influence the microclimate of the nests.