

DO BOTTLENOSE DOLPHINS (*TURSIOPS TRUNCATUS*) FOLLOW ANY SEASONAL MOVEMENT PATTERN IN THE STRAIT OF GIBRALTAR?

Pérez-Gimeno, N. (1, 2, 3), De Stephanis, R. (1,2, 3), Salazar-Sierra, J.M., (1,3) Verborgh, P. (1) Cañadas, A. (3,4) Guinet, C. (5).

(1) CIRCE, Conservation Information and Research on Cetaceans, C/Cabeza de Manzaneda 3, Algeciras-Pelayo, 11390 Cadiz, Spain; (2) Laboratorio de Acústica y Vibraciones de la Universidad de Cádiz. CASEM, Polígono Río san Pedro s/n Puerto Real Cádiz, Spain; (3) Sociedad Española de Cetáceos C/Nalon 16, La Berzosa, Madrid, Spain; (4) Alnitak C/Nalon 16, La Berzosa, Madrid, Spain; (5) Centre d'Études Biologiques de Chizé, CNRS UPR 1934. 79 360 Villiers en Bois, France.

The Strait of Gibraltar is the only natural passage between the Atlantic Ocean and the Mediterranean Sea. It is characterized by a high diversity of cetacean species with seven species numbered, some of them transiting in and out of the Mediterranean Sea. Sightings of bottlenose dolphin (*Tursiops truncatus*) have been reported in the study area since 1998. They are found in the deeper waters of the central channel of the Strait of Gibraltar. However, little is known about the social structure and migration patterns of this species in the region. The present study focuses on the possible seasonal movements of bottlenose dolphins in the Strait. Boat-based survey transects were conducted during 2001 and 2002, covering 6,307.25 km. A total of 69 sightings of bottlenose dolphin were analysed, in which the estimated group size ranged from 1 to 200. The analyses indicate that this species was more abundant during late autumn, winter and spring (encounter rates of 0.130, 0.125 and 0.132 sighting per km respectively) than during summer, (encounter rate of 0.091 sighting per km). Furthermore, the larger group sizes occurred mainly during winter time (mean = 43.8) and spring (36.6), with the minimum averages in summer (20.5) and autumn (19.1). Therefore, the number of individuals per km was maximum in winter (5.49), while in summer it was 1.88, being the minimum for all seasons. Further work is being carried out, through photo-identification, to determine if the lower numbers of dolphins in the Strait of Gibraltar during summer is due to seasonal movements into the Alboran Sea, the Atlantic contiguous waters or the Moroccan waters.