

SPATIAL DISTRIBUTION OF SMALL ODONTOCETES IN THE STRAIT OF GIBRALTAR IN RELATION TO THE MARITIME TRAFFIC, FISHERIES AND WHALE WATCHING ACTIVITIES

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The Strait of Gibraltar, the only natural passage between the Mediterranean Sea and the Atlantic Ocean, characterized by a surface inflow of Atlantic waters and a deep outflow of dense Mediterranean waters, is inhabited by a large number of cetacean species. The present study focuses on the occurrence and the spatial distribution of small odontocetes species within the Strait in relation to the maritime traffic, the fisheries and the whale watching activities. Shipboard visual surveys were conducted between 2001 and 2005, covering 11235 km. A total of 877 sightings of 6 cetacean species were realised. The spatial distribution of 6 odontocete species: common dolphins (*Delphinus delphis*), striped dolphins (*Stenella coeruleoalba*), long-finned pilot whales (*Globicephala melas*), bottlenose dolphins (*Tursiops truncatus*) and killer whales (*Orcinus orca*) was examined with respect to the depth, the slope, the latitude and the longitude using GAMs. These analyses indicate that these species are directly related to the whale watching activities (13 boats), and the maritime traffic (91009 fast ferries, ferries and cargos crossed the area in 2004) and the fishing activities of red tuna (*Thunnus thynnus*) fisheries occurring in the south western part of the Strait