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(5) Abstract title:	COMPETITION FOR THE RESOURCES BETWEEN PILOT WHALES, BOTTLENOSE DOLPHINS AND SPERM WHALES IN THE STRAIT OF GIBRALTAR.
(6) Abstract:	The spatial distribution of 6 species: short-beaked common dolphins ( <i>Delphinus delphis</i> ), striped dolphins ( <i>Stenella coeruleoalba</i> ), long-finned pilot whales ( <i>Globicephala melas</i> ), bottlenose dolphins ( <i>Tursiops truncatus</i> ), sperm whales ( <i>Physeter macrocephalus</i> ), and killer whales ( <i>Orcinus orca</i> ) was examined with respect to the depth and the slope in the Strait of Gibraltar between 2001 and 2004 using GAMs. These analyses indicate that these species could be ordered into three groups. A first group, with a northward tendency is composed by common and striped dolphins. This group is likely to be feeding on mesopelagic fishes or squids associated with the surface Atlantic waters. The second group, constituted of bottlenose dolphins, long-finned pilot whales and sperm whales is mainly found over the deep waters of the central part of the Strait, and would share the same habitat. The third group, formed by killer whales was associated with bluefin tuna ( <i>Thunnus thynnus</i> ) fisheries. Nitrogen ( $^{15}\text{N}$ ) and carbon ( $^{13}\text{C}$ ) stable isotopes were used, to denote the position of the species of the second group within the food web, to trace the origin of trophic resources exploited by them and then to look at possible competition for the resources. Bottlenose dolphins ( $n= 21$ , $\delta^{15}\text{N}= 13.42$ SD= 0.89, $\delta^{13}\text{C}= -16.02$ , SD= 0.62) and sperm whales ( $n= 4$ , $\delta^{15}\text{N}= 13.43$ SD= 0.41, $\delta^{13}\text{C}= -15.72$ , SD= 0), showed same values between them, but significantly different from the values of long-finned pilot whales ( $n= 54$ , $\delta^{15}\text{N}= 11.27$ SD= 0.38, $\delta^{13}\text{C}= -16.35$ , SD= 0.40). This suggests that the two first species share the same diet, but are segregated in depth. Although they share the same spatial distribution, they have a different diet from long-finned pilot whales, which eliminates a possible spatial competition for the resources between them.
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