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(5) Abstract title:	WHAT IS THE CONSERVATION STATUS OF LONG-FINNED PILOT WHALES IN THE STRAIT OF GIBRALTAR?
(6) Abstract:	Long-finned pilot whales are classified as “data deficient” in the Mediterranean Sea by the IUCN. This study used population viability analysis of pilot whales in the Strait of Gibraltar to assess their conservation status. Photo-identification techniques allowed estimating the basic life parameters of the population. Survival rates were found to be 0.677 for calves, 0.861 for juveniles and 0.985 for adults in 1999-06 with a total abundance of 345 animals in 2006. The inter-calving interval was found to be 4.5 years (range 2-7). These life history parameters were first used to assess the viability of the pilot whale population before the Morbillivirus event over 100 years using PVA models. The population was estimated to persist over 100 years with a 100% probability. Secondly, 2006-07 Morbillivirus epizootic was estimated to induce a 21.2% reduction in the survival rate. Finally, a second PVA was realized to assess a potential change in the population extinction probability after the epizootic event. Simulating catastrophe events every 16 years and a 21.2% survival reduction, a decreasing trend was observed over 100 years (43% reduction of population size) but the extinction probability only rose to 0.1%. Therefore, the pilot whale population of the Strait of Gibraltar was believed to persist over 100 years even with chronic Morbillivirus events. This study assessed for the first time the viability of the population in the Strait of Gibraltar over 100 years before and after the epizootic. In the latter cases the population should be classed as “vulnerable” according to the criteria A3 as more than 30% decrease is expected over 100 years due to a “pathogen” which is the Morbillivirus.
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