

ORIGIN AND DISPERSAL ROUTES OF FOREIGN GREEN AND KEMP'S RIDLEY TURTLES IN SPANISH ATLANTIC AND MEDITERRANEAN WATERS

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Abstract

The presence of the green and Kemp's ridley turtles is rare at Atlantic and Mediterranean Spanish waters, but the records have increased during the last decades. We reported a new set of records and reviewed all the historical observations of these species. The analysis of a mitochondrial DNA fragment of the newest records provided insights about the origin of the individuals. The Kemp's ridley turtles arrived from the western Atlantic nesting beaches, although the discovering of a new haplotype suggested the existence of an unknown or low sampled nesting area of origin. Furthermore, the genetic analysis was crucial for the species identification in one specimen, hence recommending the use of genetic markers to confirm the presence of a rare species. All green turtles presented haplotypes exclusive from Atlantic nesting beaches and concentrated in the African populations. Thus, the closest eastern Mediterranean nesting areas were discarded as source populations and a new migration route for this species was described.