

EVALUATION OF MALE BREEDING POPULATION INFERRED FROM PATERNITY ANALYSES IN THE CAPE VERDE ISLANDS

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Abstract

Because of the extensive migrations of marine turtles through the ocean, many aspects of their biology have been unknown for a long time. However, much information has been recently gained from genetic studies and population monitoring of female turtles at their nesting sites. In contrast, still very little is known on the genetic diversity, population structure and dispersal patterns of the male breeding population, mainly because of the difficulty of capturing and monitoring them at sea. The aim of this study is to assess the genetic patterns of the male breeding population of the loggerhead turtle, *Caretta caretta*, using a non invasive approach and compare them to the female breeding population. This study will allow us to infer male genotypes based on a large previous data set of paternity analyses in this population, and analyse their genetic composition and patterns of variability without capturing them. In addition, we will identify the genetic composition of males with higher paternity contribution. The use of paternity programs to evaluate the reliability of father's genotypes, and the relevance of paternity analyses as non invasive methods for genetic characterization and estimation of male abundance will also be discussed.