
FINE-SCALE PATERNITY STUDY OF A LOGGERHEAD FROM CAPE VERDE: WITHIN AND BETWEEN SEASONS

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Genetic analyses of reproductive strategies (multiple paternity and sperm storage) are promoting important information to define the criteria and the measures of conservation of many species, such as the level of genetic variability and effective population size. Furthermore, the knowledge of the mating system is particularly relevant for the protection and recovery plans of sea turtles. The population of common turtle, *Caretta caretta* of the Archipelago of Cape Verde is one of the greater nesting populations of the Atlantic, together with those of Florida and Oman. During the nesting season, loggerhead sea turtles nest on a particular beach, generally laying their subsequent clutches on the same area. In this study, 15 mothers and offspring's were collected in the island of Boa Vista during the peak of the annual 2004 nesting season, to investigate fine-scale multiple paternity. All female turtles were tagged with metal rings and microchips for identification. For one of the females (named Hortensia), we were able to detect five nests in the same nesting season (2004) and one more nest in 2006. For each of the nests, 27 hatchlings were randomly selected immediately after their emergence. A biopsy of a rear marginal scute was done and samples were stored at room temperature in 70% ethanol until DNA extraction is done. This study will address the following questions: (1) Is multiple paternity common in the loggerhead sea turtle population of Boa Vista? (2) Is the frequency of multiple paternity and the contribution of the multiple fathers homogeneous in the consecutive nests of one female through the nesting season? (3) Is there any evidence of sperm storage between subsequent nesting seasons? Little is known of the courtship behavior and breeding structure of sea turtles, nor of the migratory conduct of *Caretta caretta* males implicated in mating groups. This study will try to resolve these questions for loggerhead sea turtles in Boa Vista Island.