ABSTRACT

POPULATION GENETIC STRUCTURE OF THE LOGGERHEAD (Caretta caretta) IN THE TURKEY

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The loggerhead is distributed in tropical and subtropical waters. Greece, Turkey and Libya are the countries with the densest loggerhead nestingin Mediterranean. No detailed studies are available on the population and conservation genetics of the loggerhead turtles nesting on the coasts of Turkey. We, therefore, aimed to determine the genetic structure of the *C. caretta* populations at the eighteen nesting beaches a long the Aegean and Mediterranean cost of Turkey by using the control region of the mitochondrial DNA (mtDNA) (n= 256) and six microsatellite loci(n=213). A total of seven mtDNA haplotypes were determined. The mitochondrial genetic differences among nesting colonies supported the nest site fidelity of females while microsatellites did not show genetic structuring which means male-mediated gene flow among nesting colonies. Inconlusion, based on mtDNA results five managementunits were described in Turkey. No genetic structuring was observed among nesting beaches in terms of DNA.

Keywords: *Caretta caretta*, mitochondrial DNA control region, haplotype, microsatellite, Mediterranean,