

Monitoring *Caretta caretta* (Linnaeus, 1758) Population At Bostanlık Beach in Phaselis/Antalya in Summer 2016

Recep GÜLER¹, Mustafa YAVUZ¹,

¹Department of Biology, Faculty of Science, Akdeniz University, Antalya, Turkey
myavuz.akd@gmail.com

Aim of the study: Bostanlık Beach is new nesting areas of sea turtles "*Caretta caretta*" in Turkey. Apart from its natural, cultural and historical features, it is also one of the outstanding areas with its ecological structure, rare flora and fauna and precious agrarian areas. It has also become an important vocational place for visitors. The first observations about *C. caretta* hatchlings was made in 2014 (Yavuz and Tunç 2015) on this shore. In the present study, we examined incubation period, hatching success, and percent emergence in loggerhead turtle nests on Bostanlık Beach in Phaselis/Antalya at Turkey.

Material and Methods: The reproduction of the sea turtle population at Bostanlık Bay Beach in Phaselis Ancient City/Antalya west-southern Turkey was investigated in 2016. The study was conducted from the first week of May to mid-September in 2016. The beach, is divided into two sections (eastern section about 350 m and west approximately 500 m) because of the tor which extends from near the middle section. The beach was patrolled early in the morning for record any loggerhead turtle activity. All the activities from the previous night were accepted and evaluated as the next day's activity. A nest was recorded when a track led to an area of disturbed sand where digging and covering had occurred. All the nests were left in situ. False crawls were recorded in one of two ways: (1) when some digging in the sand, if only slight, occurred but no covering was apparent (i.e., an attempt to dig a body pit and (or) egg chamber by the female) or (2) when a sea turtle made no nesting or digging attempts but simply crawled on the beach and then crawled back to the sea. Species identification was possible using the criteria of track and nest-pit morphology (Groombridge 1990). The beach was patrolled from 0 m to 500 m and early in the morning for record any loggerhead turtle activity. All the activities from the previous night were accepted and evaluated as the next day's activity.

Results: A First hatchings of *C. caretta* matures began in 16May 2016 in shore of Bostanlık Beach. The last matures hatchings were recorded in 06July 2016. In this study it has been identified in the breeding season Bostanlık Beach is a total of 11 Loggerhead Turtle (*Caretta caretta*) nests were found in the western section and hatchling occurred in 5(45.45 %) of these nests. The remaining 6 nests were excavated by predators. On the other hand, in the east section which is using extensively by tourists and local peoples, only a total of 5 nests were found. None of these nests had a hatching, due to predation. The spatial distribution of nests at 5m intervals from the water's edge in the morning to a distance inland were statistically different (Mann–Whitney U test, $U = 276.33$ $P < 0.001$). Loggerhead turtle activities resulted in nests mainly at 10–25 m from the sea. The mean incubation period was 51.64 ($n=5$, $min=46$, $max=55$) days for the year 2016. The main predators were martens (*Martes foina*), red foxes (*Vulpes vulpes*) and dogs (*Canis domesticus*).

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