

Reproductive ecology of Soft-shelled Nile Turtle (*Trionyx triunguis*)Onur CANDAN¹¹Molecular Biology and Genetics Department, Ordu University, Turkey
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Aim of the study: There were limited studies on *Trionyx triunguis* in Turkey where has the largest population found in. The reproductive features of the species is little known. Also, studies on this species nesting ecology are conducted on western Mediterranean. The aim of this study is investigate the nesting ecology of *Trionyx triunguis* and providing more knowledge from the beaches that have no data for filling the gaps.

Material and Methods: This study was conducted on three different beaches (Belek, Göksu and Bumaz) in the Mediterranean coastline of Turkey. Beaches were patrolled morning from 15 May to 30 September during the 2016 nesting season. Throughout the morning patrols found nests and were all marked on a daily basis. All nests were caged against predation with mesh grid cages. Nesting dates, distance from high tide line and coordinates were recorded regularly. Nest excavation was done four days after last hatchling emerges. Nest depth was measured from sand surface to the bottom of nest. Dry and wet sand depths of nest were determined by sand color. All eggs were removed from the nest and counted when excavating. Eggs were counted as hatched and unhatched. Each of the failed ones was opened to determine the embryonic stages. To give a more accurate determination of the embryonic stages the criteria of Whitmore and Dutton (1985) were used.

Results: A total of 8 nests consist of 270 eggs were investigated on three distinct beaches. One of the nests were predated. Average clutch size was 33.75 eggs (ranged between 15 to 52 eggs), and the mean nest depth was 35.3 cm (ranged between 19 to 55.1 cm). The mean distance of the nests from shoreline was 11.7 m and varied between 1.2 to 29.0 m. The average hatching success was 69% and embryonic mortality were calculated high in the early and late stages of development. The nesting records of *Trionyx triunguis* from Belek (Aksu River and Köprü Stream) and Göksu (Göksu River) were given by previous studies. But, the Bumaz Beach is the new locality record for nesting of *Trionyx triunguis* in the Eastern Mediterranean.

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Keywords: *Trionyx triunguis*, Nesting ecology, New locality, Turkey.