

Effective factors on nest site location in the hawksbill turtle (*Eretmochelys Imbricata*) in Shidvar Island

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Nest site location in reptiles is an important stage of their life cycle because environmental factors influence embryo survivorship, incubation quality and sex ratio. For studying effective factors on nest site location in the hawksbill turtle, we measured temperature, moisture, beach slope, particle size of sand and vegetation related to 35 nests in Shidvar Island. In this Island, most nests were in northern beach which has a relatively steep slope. In this slope energy costs and probability of females and hatchlings predation is low. In addition hawksbills preferred to nest amongst vegetation. Of the environmental evaluated, slope appears to have the greatest influence on nest site location, because it is associated with nest elevation and hatching success is higher from nests closest to suitable elevation. It is believed that sea turtles may use multiple cues for nest site location and use a threshold that must be reached for each environmental factor before the turtle initiates nest excavation.

Keywords: nesting, Shidvar Island, hawksbill turtle, hatching success