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A study on hatching success and green turtle (chelonia mydas) eggs mortality at Cherating Beach, Pahang / Nurul Atifah Zainal Abidin.



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KAK MILIK PERPUSTAKAAN SULTANAH NUR ZAHIRAH UNT

A STUDY ON HATCHING SUCCESS AND GREEN TURTLE (Chelonia mydas) EGGS MORTALITY AT CHERATING BEACH, PAHANG

By

Nurul Atifah Binti Zainal Abidin

Research Report submitted in partial fulfillment of The requirements for the degree of Bachelor of Science (Marine Biology)

Department of Marine Science Faculty of Maritime Studies and Marine Science UNIVERSITI MALAYSIA TERENGGANU 2007



JABATAN SAINS MARIN FAKULTI PENGAJIAN MARITIM DAN SAINS MARIN UNIVERSITI MALAYSIA TERENGGANU

PENGAKUAN DAN PENGESAHAN LAPORAN PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan projek penyelidikan bertajuk : Hatching Success and Greenn Turtle Eggs Mortality at Cherating Beach, Pahang oleh Nurul Atifah Binti Zainal Abidin. No. Matrik UK 10920 telah diperiksa dan

semua pembetulan yang disarankan telah dilakukan. Laporan in Jabatan Sains Marin sebagai memenuhi sebahagian daripada ka Ijazah Sarjana Muda Sains (Biologi Marin) Fakulti Pengaji Marin, Universiti Malaysia Terengganu.	ni dikemukakan kepada keperluan memperolehi
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ABSTRACT

Hatching success was calculated as the percentage of the total eggs in a clutch that which hatched (Rees et al., 2004). A study of hatching success and green turtle eggs mortality was done at Cherating Turtle Sanctuary Centre, Pahang from 13th October 2006 to 21st December 2006. This study was carried out at the hatchery. Objectives of this study were to determine the hatch success and hatch failure of relocated nests and to examine nest predations and problems encountered by relocating eggs to the hatchery. A total of 31 nests were excavated in this study. Average of hatching success for the hatchery study is 93%, while the percentage of hatch failure is 7%. The eggs mortality mainly caused by the nest predators which are from ants and termites, about 5% and undeveloped eggs about 2%, where the egg contained no sign of an embryo. Problems occurred during transferring nest where when carrying the bucket to the hatchery, take care not to rotate it, as quick rotation may kill the eggs. Besides, it is preferable to move the eggs within 2 hours of laying in order to avoid the disorientation during the replanted process. Special care is needed when handling eggs that are more than 2 hours old. The delicate embryonic membranes and blood vessels of older eggs are easily torn if the eggs are rotated or jarred. Dislodgement of the embryo results in death.

These studies also investigate whether the hatchery programme is practical for sea turtle conservation and management in Malaysia. Results obtained from 31 nests in the hatchery showed the high rates of hatching success, but there are some factors should take into account such as ambient temperature of the nest, the depth of eggs chamber