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DENSITY AND DISTRIBUTION OF HORSESHOE CRAB IN DIFFERENT COASTAL HABITAT OF EAST COAST OF PENINSULAR MALAYSIA

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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 Study and Marine Science UNIVERSITI MALAYSIA TERENGGANU 2007 This project should be cited as:

Rozlinda M.R.; 2007. Density and Distribution of horseshoe crab in different coastal habitat of peninsular Malaysia. Final Year Project Report, Bachelor of Science (Marine Biology), Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu. 41 p

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PENGAKUAN DAN PENGESAHAN LAPORAN PROJEK PENYELIDIKAN I DAN II

Adalah dengan ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: Distribution of Horseshoe Crab in different Coastal Habitat of East Coast of Peninsular Malaysia oleh Rozlinda binti Mohd Radzi, No Matrik UK 10588 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Marin sebagai memenuhi sebahagian daripada keperluan memperolehi ijazah Sarjana Muda Sains (Biologi Marin) Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

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ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Zaleha Kassim, for giving me the opportunity to work on this project as well as her support over these 2 semesters. Her enthusiasm for the project was extremely motivating, her advice invaluable, and her efforts greatly appreciated. I would also like to express my appreciation to my cosupervisor, Dr. Nor Antonina binti Abdullah, for providing valuable advice and support throughout all stages of my project, and their efforts are greatly appreciated as well.

I would especially like to thank my parents, friends, and fellow graduate students for their encouragement and assistance in data collection. They provided critical assistances during my sampling, ensuring I completed my projects. I would like to thank Siti Nurul Shahida for her company as well as En. Sukkeri and Pak Darus for their assistences.

Finally, I would like to thank lab assistants, En. Mohd Zan, En. Jalal and others for their patience, guidance, and support throughout this project.

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ABSTRACT

A study was conducted on the distribution and density of horseshoe crabs in three sampling sites at the east coast of the Peninsular Malaysia. The sampling sites selected for this study were Tok Bali, Setiu and Kuantan. Two species of horseshoe crab were found at the sampling sites, such as Carcinoscorpius rotundicauda or the mangrove horseshoe crab and Tachypleus gigas or the coastal horseshoe crab. Throughout the sampling period, a total of 70 C. rotundicauda and 19 of T. gigas were found from the three sampling site. Analysis of variance between the two species at their respective sites was overall not highly significant (P = 0.07). However variation between sexes was found to be highly significant (P=0.02). Both species co-exist in each sampling sites except for Tok Bali where only C. rotundicauda were found. An analysis of the morphometry of the two sexes females are generally larger then males. However statistically speaking the variation in morphometry between the males and females was found to be statistically insignificant in the case of length and width (P=0.14 and P= 0.16 respectively). In the case of weight a slight significant difference was observed between the males and females with the females being statistically heavier then the males (P=0.06). No eggs were obtained from any of the sampling sites so density of eggs could not be determined.