

IMPACT OF HUMAN ACTIVITIES TO MOLLUSCS DIVERSITY
AND DISTRIBUTION IN SETIU WETLAND, TERENGGANU

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2005

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DISTRIBUTION IN SETIU WETLAND, TERENGGANU

By

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Research Report submitted in partial fulfilment of
the requirements for the degree of
Bachelor of Applied Science (Biodiversity Conservation and Management)

Department of Biological Sciences
Faculty of Science and Technology
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA
2005

This project should be cited as:

Syarifah-Khadiejah, S.M.K. 2005. Impact of human activities to mollusc diversity and distribution in Setiu Wetland, Terengganu. Undergraduate thesis, Bachelor of Applied Science in Biodiversity Conservation and Management, Faculty of Science and Technology, Kolej Universiti Sains dan Teknologi Malaysia, Terengganu. 54p.

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PROJEK PENYELIDIKAN I DAN II**

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telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperoleh Ijazah SARJANA MUDA SAINS GUNAAN PEMULIHARAAN DAN PENGURUSAN BIODIVERSITI

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Especially to whom I owe it all.

Caring and loving parent.

Dedicated and inspiring lecturer.

Kind and considerate brothers and sisters.

Understanding and concerned one.

Helpful and lots of fun friends.

ACKNOWLEDGEMENTS

Many people have contributed to the production of this thesis. First and foremost, I would like to express my deepest gratitude to my mother for her continuous encouragement and prayers for me since my involvement in this field of study. I am fully indebted to Mr. Amirrudin Ahmad who supervises and guide me since the early stage of this research. Similarly, I wish to express my sincere thanks to Dr. Zaleha Kassim, my second supervisor. The untiring assistance from Tuan Haji Razali Salam and Syed Ahmad Rizal Tuan Nek is gratefully acknowledged. Last but not least, I wish to express my deep gratitude to Azlan Mohamed who suffered the hardship of accompanying me into the mangrove swamps. To those people, named and unnamed, who have supported and encouraged me through my preparation of this thesis, I offer my heartfelt appreciations.

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LIST OF ABBREVIATIONS

m	Meter
m ²	Meter squared
°C	Degree Celsius
%	Percent
mg/l	Milligram per litre
ind/m ²	Individuals per meter squared
DO	Dissolve oxygen
UA	Undisturbed area station A
UB	Undisturbed area station B
UC	Undisturbed area station C
DA	Disturbed area station A
DB	Disturbed area station B
DC	Disturbed area station C
ppt	Part per thousand

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ABSTRACT

A quantitative study was carried out on the diversity and distribution of mollusc in Setiu Wetland, Terengganu between 9th August to 17th September 2004. The objective of the study was to determine the impact of human activities on mollusc community at the mangrove estuary. A Peterson grab was used to sample mollusc at disturbed and undisturbed area. Two gastropods, *Cerithidae cingulata* and *Clithon oualaniensis* were dominant at most stations. No major differences in diversity and distribution detected between both areas based on the value of Sorensen's Coefficient, 89.47%. However, disturb area appeared to have more diverse and complex mollusc community since the mean value from diversity index used is 0.1 higher than undisturbed area. Nevertheless further studies including analysis on the soil characteristics are needed to understand more on their community complexity.

**KESAN AKTIVITI MANUSIA KEPADA KEPELBAGAIAN DAN TABURAN
MOLUSKA DI SETIU WETLAND, TERENGGANU.**

ABSTRAK

Suatu kajian kuantitatif tentang kepelbagaian dan taburan moluska telah dijalankan di Setiu Wetland, Terengganu di antara 9 Ogos hingga 17 September 2004. Objektif kajian adalah untuk mengetahui kesan aktiviti manusia ke atas komuniti moluska di kawasan paya bakau tersebut. Grab dari jenis Peterson telah digunakan untuk mendapatkan sampel dari kawasan terganggu dan kawasan yang bebas gangguan dari aktiviti manusia. Dua spesis gastropoda, *Cerithidae cingulata* dan *Clithon oualaniensis* dikenalpasti sebagai spesis yang paling dominan di setiap stesen. Tiada sebarang perbezaan besar dapat dilihat dalam kepelbagaian dan taburan moluska di kedua-dua kawasan berdasarkan nilai Koefisien Sorensen, 89.47%. Namun begitu, kawasan yang terganggu didapati mempunyai nilai kepelbagaian moluska yang lebih tinggi dan merupakan komuniti yang lebih kompleks kerana nilai purata indeks diversiti yang digunakan adalah 0.1 lebih tinggi. Kajian lanjut termasuk analisis sedimen adalah perlu untuk mengetahui dengan lebih lanjut tentang kaitannya dengan komuniti moluska.