

ABUNDANCE AND SPECIES DIVERSITY OF PLANKTON IN
MUSKOGEE WETLANDS NATIONAL PARK

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UNIVERSITY OF MISSISSIPPI

2007

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FMSM
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2007

**ABUNDANCE AND SPECIES DIVERSITY OF PRAWNS IN KUCHING
WETLANDS NATIONAL PARK**

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

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2007**

1100054080

This project should be cited as:

Kwan, S. 2007. Abundance and Species Diversity of Prawns in Kuching Wetlands National Park. Project report of B. Sc. (Marine Biology). Faculty of Maritime Studies and Marine Science. University Malaysia Terengganu. 68p.

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**JABATAN SAINS MARIN
FAKULTI PENGAJIAN MARITIM DAN SAINS MARIN
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LAPORAN PROJEK PENYELIDIKAN I DAN II**

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ABUNDANCE AND SPECIES DIVERSITY OF PRAWNS IN KUCHING
WETLANDS NATIONAL PARK.....

oleh SAMANTHA KWAN....., No. Matrik UK10257.....

telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Marin sebagai memenuhi sebahagian daripada keperluan memperoleh ijazah SARJANA MUDA SAINS (BIOLOGI MARIN)...
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ACKNOWLEDGEMENTS

First and foremost I thank God for I have finally completed the full report of my final year research project in time. My deepest gratitude to my main supervisor, Assoc. Prof. Liew Hock Chark for his help and support in giving me ideas and comments and also my appreciation to Mr. Amirrudin Ahmad, as my co-supervisor for his advices and opinions. Their patience and their continuous support help me to persevere and complete my project successfully.

I am very grateful to Sarawak Forest Department (SFD) for giving us the permission to conduct my study at Kuching Wetlands National Park. Thanks also to Sarawak Forestry Cooperation (SFC) for their assistance in this project and for providing us the necessary equipments to conduct our research. I would like to thank Mr. Abol for providing us transport to the mangrove area and to Mr. Langeh for helping us to cast our net. Thank you also to Dr. Charles Leh (Sarawak Museum) for his assistance during our sample analysis, and his guidance in my prawn identification.

Special thanks to my family for their love and support and their consistent encouragement gave me confident to do well in this project. Lastly, to all of my friends, thanks for being there for me, especially when I need your help and to Ms. Sik Sze Yong, you've been a great partner, thanks a lot.

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LIST OF ABBREVIATIONS

%	-	Percentage
m ²	-	Meter square
°C	-	Degree celcius
‰	-	Parts per thousand
mg/L	-	Milligram per Liter
DO	-	Dissolved Oxygen
BOD	-	Biological Oxygen Demand
<	-	Less than
<i>n</i>	-	Number of variables
<i>r</i>	-	Correlation coefficient
<i>s_r</i>	-	Standard error
<i>t</i>	-	Test Statistic
<i>α</i>	-	Alpha
<i>v</i>	-	Variance
∑	-	Sum
KWNP	-	Kuching Wetlands National Park
Sg	-	Sungai
UMT	-	Universiti Malaysia Terengganu

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ABSTRACT

A study on the abundance and species diversity of prawns in selected mangrove creeks in the Kuching Wetlands National Park was conducted during the non-monsoon and monsoon (September and November 2006) respectively. The study was done in five creeks namely Sg. Sibuh, Sg. Jebung Lurus, Radak, Sg. Besar and Sg. Seberang Rumah. Cast net was used and the number of time the net thrown was standardized to 15 times along each river. This study aim to investigate prawns species diversity and abundance during non-monsoon and monsoon period. Water parameters such as temperature, salinity, conductivity, dissolved oxygen (DO) and pH for each station were recorded. The result of this study shows that, there were seven species of prawns identified; two species from the first sampling (non-monsoon) and five species from the sampling conducted during the monsoon season. The study also revealed that the prawn species from the family Penaeidae dominated all the five study sites especially *Penaeus indicus*. Species diversity and evenness index of prawns were higher in monsoon compare to non-monsoon season. *Macrobrachium equidens* (Palaemonidae) and *Acetes sp.* (Sergestidae) were caught during the monsoon season and some of the individuals from *Macrobrachium equidens* and *Penaeus sp.* were found with eggs in between their pleopods. Most of the individual prawn species generally have two spawning periods throughout the year but they are most productive in November to December.