

SMALL MAMMAL DIVERSITY AT MANGROVE AREA OF  
UNIVERSITI MALAYSIA TERENGGANU

ZATIUL HANIMAH BINTI SAMSUDIN

FAKULTI SAINS DAN TEKNOLOGI  
UNIVERSITI MALAYSIA TERENGGANU  
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SMALL MAMMAL DIVERSITY AT MANGROVE AREA OF UNIVERSITI  
MALAYSIA TERENGGANU

By  
Zatul Himmah Binti Samsudin

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FAKULTI SAINS DAN TEKNOLOGI  
UNIVERSITI MALAYSIA TERENGGANU**

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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: **SMALL MAMMAL DIVERSITY AT MANGROVE AREA OF UNIVERSITI MALAYSIA TERENGGANU** oleh **ZATUL HIMMAH BINTI SAMSUDIN**, no. matrik: **UK10423** 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), Fakulti Sains dan Teknologi, Universiti Malaysia Terengganu.

Disahkan oleh: / Verified by:

  
.....  
Penyelia Utama / Main Supervisor

Nama:

Cop Rasmi:

**WONG CHEE HO**  
Pensyarah  
Jabatan Sains Biologi  
Fakulti Sains dan Teknologi  
Universiti Malaysia Terengganu  
21030 Kuala Terengganu.

Tarikh: 7/5/07.....

  
.....  
Ketua Jabatan Sains Biologi / Head, Department of Biological Sciences

Nama:

Cop Rasmi:

**DR. AZIZ BIN AHMAD**  
Ketua  
Jabatan Sains Biologi  
Fakulti Sains dan Teknologi  
Universiti Malaysia Terengganu  
21030 Kuala Terengganu

Tarikh: 8/5/2007.....

## TABLE OF CONTENTS

	<b>Page</b>
<b>ACKNOWLEDGEMENT</b>	ii
<b>LIST OF TABLES</b>	iii
<b>LIST OF FIGURES</b>	iv
<b>LIST OF ABBREVIATION</b>	v
<b>LIST OF APPENDICES</b>	vi
<b>ABSTRACT</b>	vii
<b>ABSTRAK</b>	viii
<b>CHAPTER 1 INTRODUCTION</b>	1
1.1 Objectives	2
<b>CHAPTER 2 LITERATURE REVIEW</b>	
2.1 Mammals	
2.1.1 The Origin of Mammals	3
2.1.2 Mammals Characteristic	4
2.1.3 Distribution of Mammals	5
2.1.4 Habitat of Mammals	5
2.2 Small Mammals	6
2.2.1 Habitat of Small Mammals	6
2.2.2. Diet of Small Mammals	7
2.2.4 Small Mammals in Malaysia	8
2.2.5 Study of Small Mammals in Malaysia	9
2.2.3 Importance of Small Mammals	9
2.3 Mangrove Forest	
2.3.1 Mangrove Distribution	10
2.3.2 Mangrove Characteristic	11
2.3.3 Mangrove Vegetation	12
2.3.4 Importance of Mangrove	13

2.4	Small Mammal and Mangrove	
2.4.1	Habitat for Small Mammals	14
2.4.2	Source of Food	14
2.4.3	Pollination Agent	14
2.4.4	Seed Disperser	15

### **CHAPTER 3 METHODOLOGY**

3.1	Study Sites	16
3.2	Capture Device	16
3.2.1	Trapping Method	16
3.2.2	Baits	18
3.3	Sampling	18
3.4	Handling	18
3.5	Data Collection	
3.5.1	Body Measurement	19
3.5.2	Biomass	19
3.5.3	Identification	19
3.5.4	Sex and Age Classification	19
3.5.5	Marking	20
3.6	Data Analysis	
3.6.1	Relative Abundance	20
3.6.2	Capture Effectiveness	20
3.6.3	Capture Recapture	21
3.6.4	Shannon-Weiner Index	21
3.6.5	Simpson Index	21
3.6.6	Evenness	22
3.6.7	Species Richness Index	22
3.6.8	Population Size	23

### **CHAPTER 4 RESULTS**

4.1	Sampling Result	24
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4.2	Relative Abundance	24
4.3	Bait Preferences	25
4.4	Biomass	32
4.5	Capture Rate	32
4.6	Species Diversity	32
4.7	Species Richness	32
4.8	Species Evenness	33
4.9	Comparison with previous study	33

## **CHAPTER 5 DISCUSSION**

5.1	Sampling Result	38
5.2	Bait Preferences	39
5.3	Biomass	39
5.4	Capture Rate	39
5.5	Percentage of Recapture	40
5.6	Species Diversity, Richness and Evenness	41

## **CHAPTER 6 CONCLUSION AND RECOMMENDATION**

<b>REFERENCES</b>	43
<b>APENDICES</b>	50
<b>CURRICULUM VITAE</b>	55



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## LIST OF TABLES

<b>Tables</b>	<b>Page</b>
4.1 Relative abundance of small mammal at mangrove area of UMT.	26
4.2 Small mammal at mangrove area of UMT according to different sites.	30
4.3 The mean and standard error of mean for biomass and body measurement of small mammal species captured at Site 1 and Site 2 at mangrove area of UMT.	34
4.4 Species diversity, by sites, of small mammal communities at mangrove area of UMT	36
4.5 Comparison of captured small mammal with previous study	37

## LIST OF FIGURES

<b>Figures</b>	<b>Page</b>
3.1 Map of UMT showing the two selected study sites	16
4.1 Percentage of small mammal at mangrove area of UMT	27
4.2 Percentage of small mammal at mangrove area of UMT according to Family	28
4.3 Sex ratio of small mammals captured at different site at mangrove area of UMT	29
4.4 Baits preference of small mammal at mangrove area of UMT	31
4.5. Capture rate of small mammal according to number of samplings.	35

## LIST OF ABBREVIATIONS

cm	= centimeter
HB	= head to body
HF	= hind foot
kg	= kilogram
T	= tail
TL	= total length
UMT	= Universiti Malaysia Terengganu

## LIST OF APPENDICES

Appendix	Page
1. Picture of Site 1 (a) and Site 2 (b).	50
2. Small mammal captured at mangrove area of UMT	51
3. Small mammal data sheet	53
4. The small mammals captured at Site 1 and Site 2 at mangrove area of UMT	54

## ABSTRACT

The study on small mammal diversity was conducted at the mangrove area of Universiti Malaysia Terengganu (UMT). The purposes of this study are to study the diversity of small mammals at mangrove area of UMT and also to enrich the checklist of small mammal at mangrove area of UMT. Four times sampling (August 2006 until January 2007), with five consecutive trapping days was conducted using cage-traps. A total of 25 individuals belonging to five species of small mammal were recorded. The species were *Rattus tiomanicus jalorensis* (56%), *Rattus tiomanicus sabae* (20%), *Rattus exulans* (16%), *Rattus argentiventer* and *Paradoxurus hermaproditus* with 4% respectively. The most dominant family was Muridae with 96% and Viverridae with only 4%. Site 2 noted the highest number of small mammal with 13 individuals as compared to Site 1 only 12 individuals. The value of Shannon Weiner index showed that Site 2 was more diverse with 1.2854 compared to Site 1, 0.5660. Finding of two new species had enriched the checklist of small mammals at mangrove area of UMT established by Rozleen (2004). Changes in environmental conditions would be predicted to have profound impacts on rodent communities. The disturbance was believed to be the major factor affecting the result of small mammal captured besides monsoon season.

# KEPELBAGAIAN MAMALIA KECIL DI KAWASAN BAKAU UNIVERSITI MALAYSIA TERENGGANU

## ABSTRAK

Satu kajian tentang kepelbagaian mamalia kecil telah dijalankan di kawasan bakau di Universiti Malaysia Terengganu (UMT). Tujuan kajian ini dijalankan adalah untuk mengkaji kepelbagaian mamalia kecil di kawasan bakau di UMT serta menambah senarai mamalia kecil di kawasan bakau di UMT. Pensampelan mamalia kecil telah dijalankan sebanyak empat kali (Ogos 2006 hingga Januari 2007) dengan lima hari pensampelan dengan menggunakan perangkap mamalia kecil. Sejumlah 25 individu daripada lima spesies telah berjaya ditangkap di kawasan bakau. Ini termasuk *Rattus tiomanicus jalorensis* (56%), *Rattus tiomanicus sabae* (20%), *Rattus exulans* (16%), *Rattus argentiventer* dan *Paradoxurus hermaproditus* dengan masing-masing 4%. Famili Muridae adalah yang paling dominan dengan 96% berbanding dengan Viverridae, hanya 4%. Tapak 2 mencatat tangkapan yang paling tinggi dengan 13 individu berbanding dengan Tapak 1 cuma 12 individu. Nilai bagi Index Shannon Weiner menyatakan bahawa Tapak 2 lebih pelbagai dengan 1.2854 berbanding dengan Tapak 1, 0.5660. Penemuan dua spesies baru telah menambah senarai mamalia kecil yang dibuat oleh Rozleen (2004). Perubahan yang berlaku ke atas keadaan persekitaran dijangka mempunyai impak yang besar ke atas komuniti roden. Gangguan dipercayai adalah faktor yang paling utama mempengaruhi tangkapan mamalia kecil selain musim tengkujuh.