

EFFECTS OF FEEDING FREQUENCY ON GROWTH OF PAINTED
TERRAPIN (*Clemmys barnesii*) HATCHLINGS

ROSLAINI BINTI KHALID

FACULTY OF SCIENCE AND TECHNOLOGY
UNIVERSITY OF SCIENCE AND TECHNOLOGY MALAYSIA

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PERPUSTAKAAN
KOLEJ UNIVERSITI SAINS & TEKNOLOGI MALAYSIA
21030 KUALA TERENGGANU

1100042420		

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**EFFECTS OF FEEDING FREQUENCY ON GROWTH OF PAINTED
TERRAPIN (*Callagur borneoensis*) HATCHLINGS**

By

Roslaili binti Khalid

**Research Report submitted in partial fulfillment of
the requirements for the degree of
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Faculty of Science and Technology
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**JABATAN SAINS SAMUDERA
FAKULTI SAINS DAN TEKNOLOGI
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA**

**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II**

Alasan ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:

Effects Of Feeding Frequency On The Growth Of Painted Terrapin(*Callagur borneoensis*) Hatchlings oleh **Roslaili binti Khalid**, No. Matrik UK **8339** telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Samudera sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains (Biologi Marin), Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

Disahkan oleh:

Penyelia Utama

Nama: Prof. Dr. Chan Eng Heng

Cop Rasmi:

Institut Oceanografi
Kolej Universiti Sains dan Teknologi Malaysia
21030 Kuala Terengganu.

Tarikh: **25/4/06**

Penyelia Kedua

Nama: Mr Choo Chee Kuang

Cop Rasmi:

CHOO CHEE KUANG
Pensyarah
Jabatan Sains Samudera
Fakulti Sains & Teknologi
Kolej Universiti Sains dan Teknologi Malaysia
21030 Kuala Terengganu.

Tarikh: **25/4/06**

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
SCL	Straight Carapace Length
SCW	Straight Carapace Width
SD	Shell Depth

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ABSTRACT

This study was conducted to determine the effects of feeding frequency on the growth of painted terrapin (*Callagur borneoensis*) hatchlings in an effort to develop protocols for a head-starting project. Period of this study was over three months and was performed from 2 September 2005 until 1 December 2005. Thirty painted terrapin hatchlings were used on three feedings trials (fed daily, fed twice per day and fed on alternate day). The hatchlings were fed with tilapia pellets and the amount of pellet given was maintained at 1.5% of the body weight per day. Increment in weight, straight carapace length, straight carapace width and shell depth for the entire experiment for each feedings were 113.7g; 3.16cm; 2.53cm; 1.50cm, for hatchlings fed daily, 132.8g; 3.58cm; 2.83cm; 1.58cm, for hatchlings fed twice per day, and 96.40g; 2.96cm; 2.44cm; 1.31cm, for hatchlings fed on alternate days. Two-way ANOVA analysis indicated differences among feeding frequencies with hatchlings fed twice per day exhibiting the highest growth. Survival rate of the hatchlings throughout the whole of the experiment was 100%.

KESAN KEKERAPAN PEMAKANAN KE ATAS PERTUMBUHAN ANAK

TETASAN TUNTUNG LAUT (*Callagur borneoensis*).

ABSTRAK

Kajian dijalankan untuk menentukan kesan kekerapan pemakanan ke atas pertumbuhan anak tetasan tuntung laut (*Callagur borneoensis*) dalam usaha untuk membentuk protokol untuk projek anak tetasan. Tempoh kajian adalah selama tiga bulan dan dijalankan dari 2 September sehingga 1 Disember 2005. Tiga puluh anak tetasan tuntung laut digunakan ke atas 3 percubaan pemakanan (pemberian makanan sekali sehari, pemberian makanan dua kali sehari dan pemberian makanan dua hari sekali). Anak tetasan diberi makan pellet tilapia dan jumlah pellet yang diberi diseimbangkan pada 1.5% daripada berat badan per hari. Penambahan berat, panjang karapas, lebar karapas dan kedalaman cangkerang bagi keseluruhan eksperimen untuk setiap pemakanan adalah 113.7g; 3.16cm; 2.53cm; 1.50cm, bagi anak tetasan yang diberi makan sekali sehari, 132.8g; 3.58cm; 2.83cm; 1.58cm, bagi anak tetasan yang diberi makan dua kali sehari, dan 96.40g; 2.96cm; 2.44cm; 1.31cm, bagi anak tetasan yang diberi makan sekali dalam dua hari. ANOVA dua hala menunjukkan perbezaan antara kekerapan pemakanan, dengan anak tetasan yang diberi makan dua kali sehari menunjukkan pertumbuhan yang paling tinggi. Kadar anak tetasan yang hidup sepanjang eksperimen adalah 100%.