

THE NESTING OF ESTUARINE CROCODILE (*Crocodylus Porosus*)
IN TELUK SENGAT, KOTA TINGGI, JOHOR

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**THE NESTING OF ESTUARINE CROCODILE (*Crocodylus Porosus*) IN TELUK
SENGAT, KOTA TINGGI, JOHOR**

By

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**Research Report submitted in partial fulfillment of
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**DECLARATION AND VERIFICATION REPORT
 FINAL YEAR RESEARCH PROJECT**

It is hereby declared and verified that this research report entitled:

The Nesting of Estuarine Crocodile (*Crocodylus Porosus*) in Teluk Sengat, Kota Tinggi, Johor by Aril Sharwin Hasan, Matric No. UK20931 have been examined and all errors identified have been corrected. This report is submitted to the Department of Marine Science as partial fulfillment towards obtaining the Degree **Bachelor of Science (Marine Science)**, Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu.

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LIST OF ABBRERIVIATONS

cm	-	Centimeter
mm	-	Millimeter
g	-	Gram
km	-	Kilometer
m	-	Meter
m ²	-	Meter square
ppt	-	Part per thousand
sp	-	Species
ft	-	Feet
Temp	-	Temperature
°C	-	Degree Celsius
%	-	Percent
GPS	-	Global Position System
PH	-	Past hatched nest
Std. Dev	-	Standard Deviation

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ABSTRACT

This study was conducted at Teluk Sengat, Kota Tinggi, Johor, beginning from 28th July 2011 until 31th January 2012. The aims of this study were to determine the nest dimension, eggs and hatchlings of estuarine crocodile (*Crocodylus porosus*). During the study period, 5 nests of *C. porosus* were measured for: nest length, nest width, nest height and physical parameters. The measurements of eggs and hatchlings for *C. porosus* were also been taken. The nests are mounds with mean range nest dimensions were 110 to 180 cm long, 105 to 160 cm wide and 40 to 55 cm high. Nests were close to permanent water with the average distance nest from permanent water was 5 to 50 m. The average clutch size recorded was 55.4 eggs and the nest temperature was 32.6 °C. The mean water temperature was 32.18 °C and average salinity was 21.87 ppt. The recorded mean wallow depth was 32 to 40 cm, mean length was 240 to 334 cm and mean width was 120 to 126 cm while the incubation period recorded was 93.3 days. The mean length of eggs was 8.11 ± 0.3 cm and mean egg width was 5.24 ± 0.04 cm. The mean weight of *C. porosus* eggs collected during this short study period was 120 ± 6.4 g. The average of total length of hatchlings was 25.9 ± 0.3 cm. The mean weight of the hatchlings of *C. porosus* was 59.7 ± 6.5 g. Adult female *C. porosus* remain close to the nest during incubation and excavate the nest when the young hatch.

PERSARANGAN BUAYA TEMBAGA (*Crocodylus porosus*) DI TELUK SENGAT, KOTA TINGGI, JOHOR

ABSTRAK

Kajian ini telah dijalankan di Teluk Sengat, Kota Tinggi, Johor bermula dari 28 Julai 2011 sehingga 31 Januari 2012. Objektif kajian adalah untuk menentukan dimensi sarang, saiz telur dan saiz anak buaya tembaga (*Crocodylus porosus*). Dalam tempoh kajian, 5 sarang *C. porosus* telah diukur: panjang, lebar, ketinggian sarang dan parameter fizikalnya. Ukuran telur dan anak buaya tembaga juga telah diambil bacaannya. Sarang buaya tembaga berbentuk busut dan purata dimensi sarangnya ialah 110 hingga 180 cm panjang, 105 hingga 160 cm lebar dan 40 hingga 55 cm tinggi. Sarangnya hampir dengan sumber air yang kekal dan purata jaraknya adalah 5 hingga 50 m. Purata bilangan telur yang dicatatkan adalah sebanyak 55.4 biji dan purata bagi suhu sarang adalah 32.6 °C. Purata bagi suhu air pula adalah 32.18 °C dan purata saliniti adalah 21.87 ppt. Purata dimensi kubang pula ialah 32 hingga 40 cm tinggi, 240 hingga 334 cm panjang dan 120 hingga 126 cm lebar manakala tempoh pengeraman yang direkodkan adalah 93.3 hari. Purata panjang telur pula adalah 8.11 ± 0.3 cm dan purata lebarnya pula ialah 5.24 ± 0.04 . Purata berat telur buaya *C. porosus* ialah 120 ± 6.4 g. Bagi anak buaya *C. porosus*, purata panjang yang diperolehi dalam kajian ini adalah 25.9 ± 0.3 cm dan beratnya adalah 59.7 ± 6.5 cm. Selain itu, buaya betina akan kekal di kawasan sekitar sarang semasa tempoh pengeraman dan seterusnya akan menggali sarang apabila telurnya menetas.