

THE BREVIA MATHESIS OF
EUCLID'S GEOMETRY (*Geometriæ Elementorum*)
IN LATIN METERS

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The preliminary survey of estuarine crocodile (*Crocodylus porosus*) in Setiu Wetland / Mohamad Zaid Hamzah.

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THE PRELIMINARY SURVEY OF
ESTUARINE CROCODILE (*Crocodylus porosus*)
IN SETIU WETLAND

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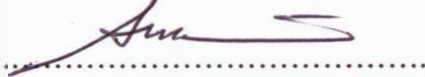


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**PENGAKUAN DAN PENGESAHAN
LAPORAN PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: **The Preliminary Survey Of *Crocodylus porosus* (Estuarine crocodile) In Setiu Wetland** oleh **Mohamad Zaid B. Hamzah**, No. Matrik **UK 10722** 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)**, Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

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LIST OF ABBREVIATION

Cm	- Milimeter
DO	- Dissolved Oxygen
Feb	- February
g	- Gram
GPS	- Global Postion System
hp	- Horse power
Ind	- Individual
km	- Kilometer
m	- Meter
MACRES	- Malaysia Center for Remote Sensing
N	- Total of samples
Nov	- November
PH	- Past hatched nest
ppt	- Parts per thousand
RCH	- Recently hatched nest
sp	- species
SPOT	- Satelite Pour I' Observation de la Terre
Temp	- Temperature
°C	- Degree celcius

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ABSTRAK

Terdapat dua spesis buaya yang menjadikan Sungai Setiu sebagai habitat iaitu *Crocodylus porosus* (Buaya Muara) tinggal di muara Sg. Setiu dan *Tomistoma schlegelii* (Buaya Julong-julong) tinggal di hulu Sg. Setiu. Tinjauan awal tentang Buaya Muara di Setiu Wetland telah dilakukan pada tahun 2006 dan 2007. Tinjauan dilakukan sepanjang 27.3 km sungai utama Sg. Setiu telah dibahagi kepada Sg. Merang, Sg. Bukit Putera, Sg. Bari dan Sg. Chalok. Purata indeks ketumpatan dengan enam tinjauan malam dilakukan di Setiu Wetland adalah 0.08 bilangan buaya diperhati / 27.3 km jarak tinjauan bagi setiap tinjauan dengan 13 individu diperhatikan. Bagi tinjauan untuk sarang buaya, terdapat 5 sarang buaya yang telah menetas, tiga adalah sarang baru yang telah menetas dan dua lagi sarang lama yang telah menetas. Purata jarak sarang dari tebing sungai adalah 3.84 m, purata bagi paksi tapak terpanjang untuk sarang yang baru menetas adalah 1.87 m, paksi tapak terpendek 1.64 m, diameter untuk lubang sarang adalah 0.38 m, kedalaman lubang sarang dari permukaan sarang adalah 0.19 m, dan tinggi sarang adalah 0.36 m. Manakala purata bagi paksi tapak terpanjang untuk sarang yang lama telah menetas adalah 1.26 m, paksi tapak terpendek 1.0 m, tiada diameter untuk lubang sarang ,tiada kedalaman lubang sarang dari permukaan sarang dicatat, dan tinggi sarang adalah 0.1 m. Tiada kubang untuk sarang baru menetas yang pertama dijumpai manakala sarang lain mempunyai sebuah kubang berdekatan. Kebanyakan sarang buaya muara dibina berdekatan, atau bertentang dengan pokok yang besar biasanya pokok *Melaleuca leucadendron*.

ABSTRACT

There are two species of crocodile inhabit the Setiu River, the *Crocodylus porosus* (estuarine crocodile) at the estuarine of Setiu River and the *Tomistoma schlegelii* (false gharial) at up stream of Setiu River. The preliminary survey of estuarine crocodile in Setiu Wetland has done on 2006 and 2007. The survey has covered 27.3 km in length of main Setiu River, Merang River, Bukit Putera River, Bari River and Chalok River. The mean index densities of crocodile for 6 nocturnal spotlight survey in Setiu Wetland were 0.08 number of crocodiles observed / 24.7 km distance traveled for each survey with 13 individuals sighted. For the nest survey, 5 hatched nests were found, three the recently hatched nests and two other the past hatched nests. Mean distance of nests from river banks for all nest was 3.84 m, mean for longest base axis for recently nests was 1.87 m, shortest base axis was 1.64 m, diameter of nest opening was 0.38 m, nest opening depth was 0.19 m from nest surface and height of nest was 0.36 m. While mean longest base axis for past hatched nests was 1.26 m, shortest base axis was 1.0 m, there were no diameter and depth of nest holes record, and mean for height of nest was 0.1 m. There was no wallow observed at first nest that had been hatched and other nests have one wallow near the nest. Most of estuarine crocodiles nest in Setiu Wetland were built close to, or against to large tree usually the *Melaleuca leucadendron*.