

EFFECTS OF NIGHT FISHING LIGHT ON THE  
ORIENTATION OF SEA TURTLE HATCHLINGS

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by

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*"Only men can do the destructions  
on this world "*  
( The al-Quran )

## ABSTRAK

Kajian orientasi berenang anak penyu yang baru menetas di laut apabila didedahkan kepada dua jenis lampu perikanan malam (lampu fluorensen bot candat sotong dan lampu gas rumah api pukot jerut malam) telah dilakukan. Kewujudan lampu perikanan malam di kawasan Pusat Penetasan Penyu, Rantau Abang telah disahkan melalui pemerhatian yang dilakukan sebelum kajian. Empat kawasan pantai ujian di Terengganu serta 38 ekor anak penyu (15 anak penyu agar, *Chelonia mydas* dan 23 ekor anak penyu belimbing, *Dermochelys coriacea*) telah digunakan di dalam kajian ini. Keputusan kajian mendapati kedua-dua spesies anak penyu adalah fototaksis secara positif kepada cahaya yang didedahkan kepada mereka. Kesan sampingan dari kedua-dua lampu perikanan malam yang dikenali pasti ialah akan melambatkan tempoh berenang 'frenzy' anak penyu dan berpontesi untuk meningkatkan kadar pemangsa terhadap mereka. Secara perbandingan pula, di dapati anak penyu lebih tertarik kepada cahaya lampu fluorensen daripada lampu gas.

## ABSTRACT

A study on sea orientation of newly emerged turtle hatchlings after exposure to two kinds of night fishing lights (fluorescent lamps of squid jigging boats and light raft gas lamps of night purse seines) was carried out. The existence of night fishing lights in the vicinity of the Rantau Abang Turtle Hatchery were confirmed through observations before the study. Four test beaches in Terengganu and 38 hatchlings (15 green hatchlings, *Chelonia mydas* and 23 leatherback hatchlings, *Dermochelys coriacea*) were used in the study. Results indicated that both species were phototaxic to exposed light. Side effects from these night fishing lights that were identified was reduced duration of frenzied swimming in hatchlings which potentially can increase mortality due to predation. In comparison, turtle hatchlings are more attracted to fluorescent lamps than gas lamps.