

A STUDY OF GHOST NETS IN CORAL REEF
AREA AT BIDONG ISLAND, TERENGGANU

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**A STUDY OF GHOST NETS IN CORAL REEF AREA AT BIDONG ISLAND,
TERENGGANU**

By

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**Research Report Submitted in partial fulfilment of
the requirements for the degree of
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DEPARTMENT OF MARINE SCIENCE
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DECLARATION AND VERIFICATION REPORT
FINAL YEAR RESEARCH PROJECT

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

A study of ghost nets in coral reef area at Bidong Island, Terengganu by **Nurul Akma Binti Mohd Yusof** Matric No. **UK18073** have been examined and all errors identified have been corrected. This report submitted to the Department of Marine Science and as a partial fulfillment toward obtaining the Degree of Marine Biology, Faculty of Maritime Study and Marine Science, University Malaysia Terengganu, Terengganu, Malaysia.

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LIST OF ABBREVIATIONS

GPS	-	Global Positioning System
FASM	-	Faculty of Aquaculture and Food Science
FMSM	-	Faculty of Maritime Science and Marine Science
kg	-	kilogram
MARPOL	-	International Convention for the Prevention Pollution from Ships
mm	-	milimeter
UMT	-	Universiti Malaysia Terengganu

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A STUDY OF GHOST NETS IN CORAL REEF AREA AT BIDONG ISLAND, TERENGGANU

ABSTRACT

A study of ghost net in the coral reef area was conducted by using scuba diving method in three stations at Bidong Island. Fishing related debris was the highest benthic marine debris found with 49.4% from the total of 77 samples benthic marine debris removed. Fishing gear related debris was comprised of trawl nets, gill nets, purse seine nets and fishing lines. Fishing lines was recorded as the highest number of marine debris found with of total 20 items. 10 items of trawl net was found in ghost nets category followed by with 5 items of gill net and 3 items of purse seine nets. Rope category was the second abundance of benthic marine debris found with 35% (25 items) and followed by others category with 18% (14 items). For ghost nets view of degree of epibiont encrustation, 4 classes of degree of epibiont encrustation was determine comprised of none degree of epibiont encrustation found, lightly, moderate and heavy degree of epibiont attach with nets. Category from lightly encrustation of epibiont obtained the highest data with 28 items. 20 items from the total was recorded by fishing lines. With existence of epibiont encrustation, it was possible to state that ghost nets collected were remains submerged in the water for an extent of period. More study in benthic marine debris should conduct in Malaysia and in a same time more education programs and awareness among Malaysian people are suggested.

KAJIAN MENGENAI 'GHOST NETS' YANG TERDAPAT KAWASAN TERUMBU KARANG DI PULAU BIDONG TERENGGANU.

ABSTRAK

Satu kajian 'ghost nets' dalam kawasan terumbu karang dijalankan dengan menggunakan kaedah selam skuba dalam tiga stesen di Pulau Bidong. Sampah bentic dari jenis peralatan penangkapan ikan mencatatkan jumlah data yang paling tinggi dijumpai dengan 49.4% dari jumlah 77 sampah marin bentic dikeluarkan semasa kajian ini dijalankan. Peralatan menangkap ikan yang dijumpai termasuklah daripada jenis pukut tunda pukut insang, pukut kaya dan tali joran. Tali joran telah mencatatkan jumlah sampel tertinggi yang dijumpai dengan 20. 10 sampel dari pukut tunda ditemui diikuti oleh pukut insang dengan 5 sampel dan pukut kaya. Sampah marine bentic dari jenis tali pula mencatatkan jumlah kedua tertinggi dengan 35% (25 sampel) dan diikuti oleh kategori jenis lain-lain dengan 18% (14 sampel). Peratus keseluruhan 'ghost nets' diliputi oleh organism laut yang melekat dikategorikan kepada 4 kelas iaitu tiada peratus organism melekat dengan 'ghost nets', hanya sedikit organisma melekat pada 'ghost nets', separuh daripada 'ghost nets' diliputi oleh organisma marin dan kebanyakan permukaan 'ghost nets' diliputi oleh organisma marin. 'Ghost nets' yang dijumpai dengan hanya sedikit organisma melekat padanya mencatatkan jumlah yang paling tinggi dengan 28 sampel. 20 daripada 28 sampel tersebut adalah dari jenis tali joran. Kemudian diikuti oleh 'ghost nets' yang dijumpai dengan separuh permukaannya diliputi oleh organisma iaitu dengan jumlah 9 sampel. Kehadiran organisma yang melekat pada sampah marin bentic, ianya boleh disimpulkan bahawa sampah tersebut telah berada di dalam air dalam satu jangka waktu tertentu

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