DIET COMPOSITION AND FOOD HABITS OF FISH SPECIES FROM THE SETIU WETLAND, SETIU, TERENGGANU

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FMSM
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2007

1100054078

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Universiti Malaysia Terengganu

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DIET COMPOSITION AND FOOD HABITS OF FISH SPECIES FROM THE SETIU WETLAND, SETIU, TERENGGANU

By

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Research Report submitted in partial fulfillment of
The requirements for the degree of
Bachelor of Science (Marine Biology)

Department of Marine Science
Faculty of Maritime Studies and Marine Science
UNIVERSITI MALAYSIA TERENGGANU
2007

1100054078

This project should be cited as:

Rozaini, R. 2007. Diet Composition and Food Habits of Fish Species from the Setiu Wetland, Setiu, Terengganu. Final Year Research Project report, Bachelor of Science (Marine biology), Faculty of Maritime Studies and Marine Science. Universiti Malaysia Terengganu. 64p.

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PENGAKUAN DAN PENGESAHAN
LAPORAN PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:

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ACKNOWLEDGEMENT

Alhamdulillah, thanks to Allah S.W.T. for giving me the opportunity to have this final year research project done well. Thanks to Universiti Malaysia Terengganu for giving me a place to study from the start.

I would like to express my gratitude to Dr. Zainudin Bachok, my supervisor for his guidance, encouragement and helping me along my final year project. Here also, I would like to thank all the lecturers who gave opinion, comment and encouragement to me upon completing my final year project. Thanks to Department of Marine Science and Faculty of Maritime study and Marine Science, all Biodiversity Laboratory Officer, science officers, Net Loft Staff and other staffs for all of their help.

Here, I would like to thank my parent Mr. Roslan B. Mohd Noor and Puan Azizah Bt. Hassan for their support and encouragement to me in accomplishing this work. Also to all my friends who help me a lot during sampling and lab work especially Miss Amira Sayati Bt. Abd. Razak, Mr. Syahnon Bin Mohammad, Mr. Mohd Kamel Zikry Bin Saleh, Mr. Khairul Azlan B. Abd. Aziz, Mr. Adi Dhamiri Bin Abu Hanif, Mr. Mohd Yazid, Mr. Mohd Afiq Bin Md. Razi, Mr. Danial Hafiz Bin Hamdan and Mr. Rosafendi Bin Rosli. Not forgotten, thanks to all Marine Biology third year students in everything they have done for me.

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LIST OF ABBREVIATION

Ppt = part per thousand

^{0}C = degree Celsius

g = gram

mg/l = milligrams per liter

cm = centimeters

no. = number of specimen

m = metre

TS = total number of specimen

TLR = total length range

WTR = weight range

% = percentage

CN = Numerical Composition

CW = Gravimetric Composition

F = Frequency of Occurrence

IRI = Index of Relative Importance

B = Niche Breadth

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ABSTRACT

A total of 192 fish stomachs of 17 species from the Setiu Wetland of Terengganu were analyzed to determine the diet composition and describe food habits of the fishes presenting. 20 prey items were found and categorized into eight groups namely algae, annelida, cnidaria, crustacean, fishes, mollusca, nematode and zooplankton. The variety and characteristics of diet composition among species was discussed using indices which are composition in numerical, composition by gravimetric and frequency of occurrence. The most important food items in the stomach for each species and overall specimen were showed by the Index of Relative Important (*IRI*). The highest value of IRI was found in bivalve (IRI = 356.911), indicates that they are relatively important in the fish community at the studied place. In order to describe the food habits among species, niche breadth, (B), was used which described the range of food taken or utilize by fishes. By this method, found that species utilizing a broad range of food items were *Ephinephelus malabaricus* (*Avg. B* = 2.551) followed by *Leiognathus equulus* (*Avg. B* = 2.120) which mean predators are tend to feed on variety of food items. Fish then being grouped and classified through their feeding habits which are carnivore, herbivore, omnivore or planktonivore and in term of their ability consuming range of food whether they are specialist or generalist.