

THE ECOLOGICAL DISTRIBUTION AND STANDING
STOCK OF SEPTIFER VIRGATUS (WEIGMANN)
IN SULPA ISLAND

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In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Biology

by
Hilda D. Lastimosa
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This thesis entitled "THE ECOLOGICAL DISTRIBUTION AND STANDING STOCK OF SEPTIFER VIRGATUS (WEIGMANN) IN SULPA ISLAND," prepared and submitted by Hilda D. Lastimosa in partial fulfillment of the requirements for the degree of M.S. Biology major in Zoology has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

Thesis Committee

Jesus V. Juario Ph.D.
JESUS V. JUARIO, Ph.D.
Adviser

Airlin S. Espina
AIRLIN S. ESPINA, M.S.
Member

Exuperancio A. Montecillo
EXUPERANCIO A. MONTECILLO, M.S.
Member

PANEL OF EXAMINERS

Approved by the Committee on Oral Examination with a grade of Passed.

Jesus V. Juario Ph.D.
JESUS V. JUARIO, Ph.D.
Adviser

Lourdes Y. Varela
LOURDES Y. VARELA, Ph.D.
Chairman

Airlin S. Espina
AIRLIN S. ESPINA, M.S.
Member

Exuperancio A. Montecillo
EXUPERANCIO A. MONTECILLO, M.S.
Member

Armisticia A. Vaño
ARMISTICIA A. VAÑO, M.A.T.
Representative

DEC, Region VII, Central Visayas
Cebu City

Accepted and approved in partial fulfillment of the requirements for the Degree of M.S. Biology major in Zoology.

Comprehensive Examinations Passed: September 17, 1970.

Lourdes Y. Varela
LOURDES Y. VARELA, Ph.D.
Dean, Graduate School

Date: February 20, 1976

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A B S T R A C T

A study on the ecological distribution and standing stock of the mussel, Septifer virgatus (Weigmann) was conducted in Sulpa Island, Mactan, Cebu, from April 1975 to August 1975. Results of the study reveal that mussels were found attached only to "solid" rocks with rough surfaces at low tide mark; no mussels were found attached to "loose" rocks even at low tide mark. In addition, mussel beds were found only in that side of Sulpa Island facing the Hilutungan Channel. Length of exposure of the coastline to dryness and current strength are considered to be the most important factors that limit the distribution of mussel beds only to this side of Sulpa Island.

The population density of mussels was estimated to be 80 organisms per meter square. The corresponding dry weight biomass was 2,000 per square meter.

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I. INTRODUCTION

General

It is well known that largely, people in the tropical and sub-tropical areas of the world rely on one staple food, generally root or cereal crop, the protein of which is lacking in one or more of the 10 amino acids essential to human nutrition. One way of improving the quality of the human diet is to redistribute available supplies to ensure a properly balanced diet; instead of eating only one type of staple food, people should eat different types of vegetables to ensure that they receive the essential amino acids and other constituents of a healthy diet. Another, and perhaps, a more feasible solution is to supplement the predominantly vegetable diet with animal protein. In this connection, we can turn profitably to the sea.

To keep pace with the nutritional needs of the exploding population, most countries of the world are now placing much emphasis on aquaculture. The most commonly cultivated marine organisms are the molluscs, such as oysters and mussels which are filter feeders and occupy low position in the marine food pyramid (Steele, 1970; Iversen, 1968). It can be generally said that bivalves play a considerable role as a food