

A PROPOSAL FOR CORAL RESEARCH

GROWTH STUDIES OF CORAL ON SOUTH FLORIDA REEFS

Submitted to the Oceanographic Center

By Ellie Mae Peterson, Ph.D.
Professor, Oceanography
Florida School of Science
And

Jeremy L. Prow, Ph.D.
Associate Professor, Marine Biology
Department of Biology
University of Eastern Florida

Summary

The Florida School of Science and the University of Eastern Florida propose a joint venture to conduct a five-year study to establish a database of the growth of coral on south Florida reefs. This guide will be used to compare with other studies of similar corals in order to gain a deeper understanding of the environmental conditions that affect coral growth. We are requesting partial funds of \$10,799.64 to enable us to complete the initial phase of this much needed research.

Purpose and Description

This five-year study proposes to devise a computerized database that can be integrated with other coral databases in order to compare and contrast growth differences. By studying the growth differences of a variety of corals at this location, a better understanding of the impact the environment has on the growth of corals can be determined. This study will explore the fundamental principles of growth so that they may be more fully understood. These principles may then be used to protect and enhance the growth of coral reefs.

Coral

The coral found on south Florida's reefs is a healthy mixture of both hard and soft corals. Because of their diversity, we will be able to obtain a large sampling of growth patterns to record in our database.

Computerized Guide

By developing a computerized database of corals and their growth processes, we hope to establish a standardization of coral research that can be used to correlate information from other studies. This guide will be of incalculable value. Years two through five will consist of studying the corals on site, recording the data, and developing statistics.

During the initial phase of the study we propose the following three stages of development for the guide:

(1) Standardization of the coral size recording procedures. For example, each recording would be taken within one hour of high tide during the night, as well as a description of the apparent color and shape of the coral.

(2) Creation of a computerized database to enable quick, reliable recording of coral growth. This database would provide the means by which other institutions could establish their own research or add to their past research.

(3) Enter earlier data that was collected, and produce statistics from the system to check and refine the database.

The database will be developed using Microsoft Access. Students from both colleges have shown a keen interest in pursuing this project. In addition, we have extensive experience using this system.

Dr. Prow conducted the original survey of the coral in south Florida. Dr. Peterson studied the corals of the Red Sea for two years for her dissertation.

BUDGET

Connection to Marine Computer Network	\$2,360.89
Technical Support	\$5,298.00
Payroll Expenses	\$3,140.75
Total (funds requested)	\$10,799.64

Notes:

Funding/support provided by Florida School of Science, School of Oceanography includes:

Principle investigator's time
 Personal computers with Microsoft Office installed
 Routine computer supplies
 Two graduate programmers

Funding/support provided by University of Eastern Florida, School of Biology includes:

Assistant investigator's time
 Computer equipment and routine supplies
 Two graduate programmers
 Housing on south Florida reefs for investigators