An Outline of the Caribbean Coastal Marine Productivity Project (CARICOMP)

SHEILA C. WYERS Bermuda Biological Station Ferry Reach GE01 Bermuda

SUMMARY

The Caribbean Coastal Marine Productivity project (CARICOMP) will be a cooperative research effort, involving a multi-national network of marine laboratories and institutions in the Caribbean region concerned with common scientific and marine resource management questions. The project addresses the urgent need to investigate the primary factors regulating the productivity of coastal ecosystems in order to estimate the potential yield of shallow water marine resources and to formulate policies for resource use.

Basic scientific objectives of the project are to investigate the ecological dependencies between adjacent mangrove, seagrass, and coral reef ecosystems and to investigate the effects of terrestrial run-off on their productivity. In view of the contrasting environments represented in the region, comparisons will be undertaken between different locations along gradients of latitude, climate, and watershed influence. It is proposed that the basic research program, using standardized techniques at each site, will include:

1. Site description and mapping of biological communities.

Measurements of community composition, diversity, and the biomass of major components.

3. Monitoring of physical and chemical factors (e.g., temperature, tides, nutrients, suspended sediments).

4. Measurements of primary production and respiration.

5. Assessment of organic matter and nutrient fluxes.

6. Measurements of growth rates of dominant organisms.

The project also plans to analyze resource components, including:

The type and quantity of resources harvested at each site.
Relationships of harvested populations with associated ecosystems.

3. Harvesting techniques, seasonality and fisheries regulations.

Although the research emphasis is mainly at the ecosystem level, coordination will be sought with other organizations and research programs in the region which are concerned with fisheries resources.

Other objectives of the project are to assist the development of local research skills (particularly the scientific training of personnel at Caribbean research sites), to provide comprehensive bibliographic materials and a literature

exchange system for participants.

CARICOMP has been included as a pilot project of the UNESCO COMAR program, and the planning of the project has been jointly sponsored by UNESCO and the National Science Foundations of the U.S.A. The steering committee, chaired by Drs. John Ogden and Eric Jordan, is currently soliciting research proposals from marine research institutions, negotiating research funds with international agencies, and formulating details of the research plan, budget, and logistics. CARICOMP is projected to last for five years, beginning in 1987.