

**"CORAL REEFS, SEAGRASS BEDS AND MANGROVES:
THEIR INTERACTION IN THE COASTAL ZONES OF THE
CARIBBEAN" —
REPORT OF A WORKSHOP**

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In May 1982, under the sponsorship of UNESCO, IOCARIBE, and WIL, a workshop was convened in St. Croix to consider the major ecosystems of the Caribbean coastal zone and their interactions. Coastal zone scientists from 15 countries were invited by UNESCO and represented 2 major sources of expertise; ecosystem specialists and regional specialists. After 6 plenary lectures about the structure and function of each ecosystem, the workshop divided into smaller group sessions to consider the interaction of ecosystems. The groups recognized 6 potential categories of connections linking all 3 ecosystems; physical interactions, nutrients, dissolved organic matter, particulate organic matter, animal migrations, and human impacts. Some of these are much better known than others and, also, there are regional differences depending upon the structure of a particular coastal zone. Because of the importance of nutrient cycling as a major avenue of interaction of

ecosystems, the workshop adopted the terms "oligotrophic" to refer to nutrient-poor systems such as coral reefs, least tolerant of nutrient enrichment, and "eutrophic" to refer to mangroves and some seagrass beds which are correlated with high nutrient input and accumulation. Each specialist then presented a brief report on the status of knowledge on his country's coastal zone, a statement of the capability of existing research and training facilities, and a list of the major coastal fisheries. The workshop recommended the UNESCO through IOCARIBE assign a high priority to assisting Caribbean nations in the inventory of their coastal zones, to establishing training programs within the countries to develop research capabilities, and to make available regionally useful technology such as remote sensing to assist in this task. The workshop also recommended the implementation of a specific pilot project to examine the interaction of the ecosystems of the Caribbean coastal zone along a gradient of development and/or disturbance. Finally, the development of a Caribbean Coastal System Management Handbook was urged. Any of these potential projects might provide a suitable point of focus for a joint effort of the AIMLC, representing the principal source of knowledge of the Caribbean coastal zone, UNESCO, and other agencies concerned with the problems of resources in the Caribbean.