

SYMPOSIUM n° 8

**PROTECTION AND CONSERVATION  
OF THE REEF ENVIRONMENT,  
A GAMBLE ON THE FUTURE**

**PROTECTION ET CONSERVATION  
DES MILIEUX RECIFEAUX,  
UN PARI SUR LE FUTUR**

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**INTRODUCTION**

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The recent rapid advances in coral reef science marked by this series of international coral reef symposia have underlined the importance of coral reefs as ecosystems and as geological structures. Unfortunately, this growing appreciation of reef environments has been paralleled by the increasing pace of reef destruction with human pressure on the biosphere around the world. Damage to coral reefs may be direct, or more often the indirect result of other development activities. The causes vary from country to country, and range from the pressures of a growing population on subsistence food resources to luxury hotels for wealthy tourists. The result, however, is that a major productive resource of particular importance to the poorer tropical countries is in danger of being lost.

This symposium brings together papers treating the various aspects of the protection and conservation of the reef environment which must become a major preoccupation of coral reef science in the years ahead. The pressures on coral reefs, as on all the world's resources, are very great, and little can be done to prevent many more reef areas from being degraded or lost. However, a major effort now in reef protection and conservation may still save many important sites, and in this sense our efforts are an essential gamble on the future.

We need to know how to slow and stop the degradation of coral reefs by the many causes and through the many processes of which we are often still woefully ignorant. We need better methods for evaluating the damage done and for understanding the effects on the complex coral reef ecosystem. We also need to learn how to restore a damaged reef to full productivity, and even how to recreate healthy functioning coral reef ecosystems where they have disappeared. Our situation is not unlike that of modern medicine, faced with the challenge of identifying the illnesses of the human body and developing treatments that will restore the patient to full health. This effort will require the breadth and experience of all the scientific disciplines represented at this Congress, and not just the still small number of those working specifically on problems of coral reef management and conservation. The artificial distinction between basic and applied research is a luxury the world can no longer afford. Many basic problems can be addressed through useful actions or manipulations. Creating a marine reserve may not only protect a reef, but also create an opportunity to study the response of the reef ecosystem to the reduction of certain pressures.

Only a concerted effort by everyone interested in coral reefs can help to stem the tide of reef destruction. The papers in this symposium both describe the tide and examine some of the solutions.