

## INTRODUCTION

### CITRE and IMSWE studies in British Honduras

S. V. Smith

A series of events at the Smithsonian Institution beginning about 1970 and continuing to the present have led to the following group of related papers dealing with various aspects of coral reef ecology, primarily in relation to the reefs of British Honduras (Belize). A brief historical sketch of those events provides useful background information to relate the papers presented here.

During the summer of 1970 researchers from several institutions began considering the possibility of seeking funding for coral reef research from the International Decade of Ocean Exploration (IDOE) office of the National Science Foundation. This consideration, together with draft proposals and informal discussion, led in the spring of 1971 to a grant from IDOE to the Smithsonian Institution for the formulation and coordination of a long-term, multi-disciplinary, multi-institutional investigation of coral reef ecosystems. That project was named "Comparative Investigations of Tropical Reef Ecosystems" (CITRE).

Also in the spring of 1971, the Smithsonian scientists received internal financial support for a more limited effort designed to describe biotic and abiotic characteristics of coral reefs. That project was named "Investigations of Marine Shallow-Water Ecosystems" (IMSWE). Smithsonian scientists involved in the one project were for the most part involved in the other as well, so an effort was made to coordinate the two activities as much as possible.

As soon as CITRE planning funds became available, Smithsonian scientists began gathering available information from which to select sites for establishing facilities on a coral reef. Potential sites were then visited. Dahl, Macintyre, and Antonius reported on these site selection efforts, and their report is presented here in revised form. Glover's Reef, British Honduras, was selected as the initial site for CITRE efforts; a decision on Caribbean secondary sites and on a Pacific primary site was deferred for a later stage in the CITRE project.

Benthic Plants Working Group

Arthur L. Dahl

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Group Leader

During November 1971, a two-week workshop was held at Glover's Reef. The purpose of that workshop was to introduce workshop participants to techniques of quantitative total-ecosystem modeling and to gather material for preparing the formal CITRE proposal. Workshop participants had been selected to be in one or more of nine working groups which had been erected as basic units within the CITRE project. Participants and their primary working groups are given in Table 1. That table does not capture the interaction among the participants; most individuals were involved to some extent in at least one working group besides the primary one in which that table lists them.

The CITRE proposal was submitted to IDOE in January 1972. That proposal was not funded, but the efforts produced valuable results. We are using the Atoll Research Bulletin to make these results generally available rather than losing them because of the fate of the proposal itself. Dahl, Patten, Smith, and Zieman summarize the conceptual model which was developed at Glover's Reef. That model is very preliminary, and parts of it are being or already have been revised for publication elsewhere. Sachet presents the bibliographic section of the CITRE proposal. It should be emphasized that the role of the individuals presenting sections of the proposal has been editorial; all of the workshop participants (Table 1) and many other individuals contributed materially to these papers.

In addition to the papers adapted from the CITRE site selection report and proposal, several related papers have been produced. Largely as a result of efforts during the site survey and workshop, Tsuda and Dawes present a checklist of marine algae at Glover's Reef. Several papers on the geographic and terrestrial aspects of the British Honduran reef area will appear in a subsequent issue of the Atoll Research Bulletin.

We hope that the papers presented in this issue of ARB will continue the considerable interest which has been engendered in the integrated approach to coral-reef ecology as visualized by the CITRE participants. Moreover, we are confident that continued efforts in British Honduras will serve to elucidate the nature of a complex, important, but poorly-known area of Caribbean coral reefs.

Table 1.

Participants at the Glover's Reef Workshop

Stephen V. Smith Smithsonian Institution	Principal Investigator (presently at Hawaii Institute of Marine Biology)
Sir Maurice Yonge Edinburgh, Scotland	External Advisory Committee Member
George D. Grice National Science Foundation	NSF Observer

Ecosystem Analysis Working Group

Bernard C. Patten University of Georgia	Group Leader
Thelma Richardson University of Georgia	
Joseph C. Zieman University of Virginia	

Detritus and Nutrients Working Group

Robert E. Johannes University of Georgia	Group Leader
Donald W. Kinsey Mauri Bros. & Thompson, Sydney, Australia	
Nelson Marshall University of Rhode Island	
Michael E. Q. Pilson University of Rhode Island	
Kenneth L. Webb Virginia Institute of Marine Science	

Benthic Plants Working Group

Arthur L. Dahl Smithsonian Institution	Group Leader
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Michael S. Foster  
 University of California, Santa Barbara (presently at California State University, Hayward)

Roy T. Tsuda  
 University of Guam

Invertebrate Working Group

Peter W. Glynn                                      Group Leader  
 Smithsonian Tropical Research Institute

Arnfried Antonius  
 Smithsonian Institution (presently Harbor Branch Foundation, Florida)

Judy Lang  
 Smithsonian Tropical Research Institute (presently University of Texas, Austin)

James Porter  
 Smithsonian Tropical Research Institute (presently University of Michigan)

Amada Reimer  
 Smithsonian Tropical Research Institute (presently Pennsylvania State University)

Klaus Ruetzler  
 Smithsonian Institution

Plankton Working Group

Tom S. English                                      Group Leader  
 University of Washington

Arthur Barnett  
 Scripps Institution of Oceanography

Frank Ferrari  
 Texas A & N University

Robin Ross  
 University of Washington

Vertebrates Working Group

Ray S. Birdsong Group Leader  
 Old Dominion University

James E. Bohlke  
 Philadelphia Academy of Natural Sciences

Edith H. Chave  
 University of Hawaii

David W. Greenfield  
 University of Illinois

C. Lavett Smith  
 American Museum of Natural History, New York

Frank H. Talbot  
 The Australian Museum

Geology Working Group

Ian G. Macintyre Group Leader  
 Smithsonian Institution

Keith E. Chave  
 University of Hawaii

Clyde Moore  
 Louisiana State University

Jon N. Weber  
 Pennsylvania State University

Terrestrial Phenomena Working Group

F. Raymond Fosberg Group Leader  
 Smithsonian Institution

Marie-Helene Sachet  
 Smithsonian Institution

Ralph W. Schreiber  
 University of South Florida

David R. Stoddart  
 Cambridge University

Oceanography and Meteorology Working Group

Andrew C. Vastano  
Texas A & M University

Group Leader

Bruce W. McAlister  
National Science Foundation

Peter W. Glynn

Arnold Antonius

Judy Long

James Porter

Arvid Rainer

Klaus Reizler

Plankton Working Group

Tom S. Engle

Arthur Barrett

Frank Ferrari

Robin Ross

Vertebrates Working Group

Ray S. Bittsinger  
Group Leader  
Old Dominion University

James E. Bonke  
Philadelphia Academy of Natural Sciences

Edith H. Chave  
University of Hawaii

David W. Greenfield  
University of Illinois

Clifford Smithson  
American Museum of Natural History, New York

Frank H. Jablon  
The Australian Museum

Geology Working Group

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Smithsonian Institution

Keith B. Crane  
University of Hawaii

Clyde Moore  
Louisiana State University

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Cambridge University