

Preface

Coral reefs are certainly one of the crown jewels of the USA's natural heritage and the nation is aware of that. Coral reefs receive much attention by a broad cross section of society – tourists, scientists, politicians, fishermen, conservationists are but some of those who cannot escape their charm. But there is no love-affair without some responsibility for the object of affection and the US has been very actively engaged in living up to this responsibility through a long history of research and efficient management. Being prone to boast about what it has, the USA can rightly show off its coral reefs. It possesses some of the most visited coral reefs (in Hawaii and the Florida Keys) and some of the world's biggest marine reserves (the Northwestern Hawaiian Islands= Papahānaumokuākea Marine National Monument and the Pacific Remote Islands National Wildlife Refuge Complex). It is also home to some of the world's most degraded as well as the most pristine coral reefs. Not surprisingly, its coral reef research has a long history and the coral reef research community is as vibrant and active today as it has been from the early beginnings.

This book was produced with the goal of providing an overview of coral reefs in the USA and to provide a uniform entry point for the study of any specific region. It is thus a scholarly review as opposed to a status report, such as those produced by the National Oceanographic and Atmospheric Administration (NOAA) every 4 years, which should be consulted for updates regarding biological monitoring status and trajectories of the living resources under federal jurisdiction and surveillance. In contrast, the various authors who contributed to this present book provide a sampling of published and sometimes yet unpublished knowledge of the geology, biology and

oceanography of the various reef types and their inhabitants. The book is designed to provide a big picture overview of what makes each region unique (or not) and to provide a scholarly review of some key facts together with key literature. It should thus be of use both to the casual visitor seeking to generally inform him/herself of an area to be visited, and the serious scholar who wishes to receive some guidance where to begin his/her readings regarding an area of specific interest. Although most reef areas within US territorial waters are covered, it is also obvious that any such task will never be fully exhaustive and a large amount of existing literature and some information that a reader might look for will not be included. There is therefore no claim that this book is complete, it never will be, but we hope that it will be useful as an overview and entry point for each individually treated area. For any shortcomings we are to blame.

We have not included in this book the coral reefs of the Freely Associated States (the Republic of Palau, the Republic of the Marshall Islands, The Federated States of Micronesia) since we respect their political independence and therefore could not subsume them under the title "...of the USA". However, US management agencies such as NOAA and the USGS are, at least partially, involved in research and management. Information about the reef status and management issues in the Freely Associated States is provided by the various national agencies and can also be found in the NOAA Status of the Coral Reefs reports that appear every 4 years.

The organization of chapters in this present book is alphabetically by ocean and does not represent an order of listing according to any preference: first Atlantic (Florida–US Virgin

Islands–Puerto Rico–Gulf of Mexico–Navassa), then Pacific (Main Hawaiian Islands–Northwest Hawaiian Islands–Line and Phoenix Islands–Wake and Johnston Atolls–Guam and the Commonwealth of the Northern Mariana Islands–American Samoa) and finally the deep reefs of all oceans.

The editors wish to express their deep appreciation and gratitude to the authors of the various chapters for their hard work despite the exceedingly short deadline that was imposed on them in a busy time of the year. We would like to thank our publishers at Springer for believing in the project and our reviewers for providing us with excellent feedback. Reviewers for this volume were: Russel Brainard, Francine Fioust, Peter Glynn, Richard Grigg, Bob Halley, Peter Houk, Jochen Halfar, Ken Deslarzes, Greg Foster, Kristy Foster, Greg Jacoski, Jack Kindinger, Judith Lang, Barbara Lidz, Joyce Miller, Ryan Moyer, David Gulko, Christy

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