

PREFACE

The purpose of this book is to summarize in a convenient form the present knowledge about the Gulf of Mexico. Such a summary is needed in connection with a large number of new investigations which are now being conducted in the Gulf of Mexico by Federal and State organizations and private institutions. It is hoped that the background information presented here will be useful to the investigators engaged in the new research projects and will save their time and effort.

Scientific data concerning the Gulf of Mexico have been accumulating since the first explorations in the sixteenth century. They are scattered in thousands of technical publications, some of them rare and not readily available to persons in the Gulf States.

The preparation of a digest of the existing knowledge about the Gulf was suggested by a group of scientists attending, in November 1949, the meeting of the Gulf and Caribbean Fisheries Institute at Miami. The idea, proposed independently by Dr. Lionel A. Walford of the Fish and Wildlife Service and Dr. Waldo L. Schmitt, head curator, Department of Zoology, U. S. National Museum, was unanimously approved, and Paul S. Galtsoff was selected to carry out the project. The magnitude of the task has proved much greater than had been expected. Only through the hearty cooperation of the 55 contributors to this volume has it been possible to complete the work in about 3 years.

For the purpose of this book the Gulf of Mexico is defined as a partially landlocked body of water indenting the southeastern periphery of the North American Continent. Its eastern boundary was drawn from Cabo Catoche at the tip of the Yucatán Peninsula to Key West at the southernmost tip of Florida. This boundary does not constitute a natural barrier; it was arbitrarily determined because of the necessity of restricting the scope of the project. Inland the area under consideration extends to the limits of tidal waters.

The book comprises a number of articles each written by a recognized authority in his field; these are arranged, with minor exceptions, in a taxonomic order following a list of phyla, classes, and orders prepared in 1936 for the American Association for the Advancement of Science and published by Duke University Press. This plan was carried out with the following exceptions: the sections on Rotatoria and Branchiopoda were omitted because of the inability to find anyone willing to review these two groups; and, for the sake of convenience, the articles on parasitic worms were assembled in a single chapter.

A pertinent bibliography is given at the end of each section. A greater number of bibliographical references, comprising more than 4,000 author and subject cards, was prepared in cooperation with Mrs. Margaret M. Quattromini of the Fish and Wildlife Service. The 12 sets of these files have been assembled for distribution among the institutions engaged in research in the Gulf of Mexico. No claim is made that these files are complete, and additional items can be added as new references become available.

In organizing and carrying out the project, splendid cooperation and valuable suggestions were received from the contributors to the book. The writer wishes to express his profound thanks to them for their continuous interest, the great amount of work required to prepare the articles, and their constructive criticism. Waldo L. Schmitt, head curator, U. S. National Museum, and William Randolph Taylor showed unremitting interest in the progress of the work, gave valuable advice in the formulation of the plan, and were most helpful in suggesting some of the authors and persuading them to undertake the review of various groups. My thanks are also due Richard S. Green, Chief, Shellfish Branch, Division of Sanitation, Public Health Service and A. F. Bartsch, biologist, Division of Water Pollution Control, Public Health Service, for organizing the material in the chapter on water pollution; to William S. von Arx of the Woods Hole Oceanographic Institution, Francis P. Shepard of Scripps Institution of Oceanography, Remington Kellogg, Director, U. S. National Museum, Frederick C. Lincoln, assistant to the Director, Fish and Wildlife Service, and Isaac Ginsburg, Ichthyologist, Fish and Wildlife Service, for valuable comments and constructive criticism of certain parts of the book.

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PAUL S. GALTSOFF,
Fishery Research Biologist.