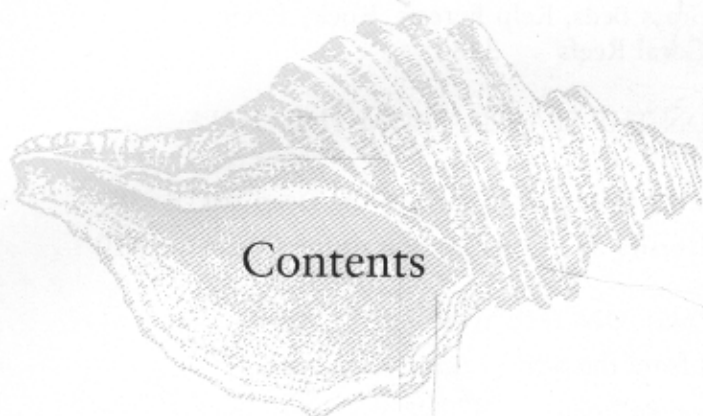




## Contents

*Preface* ix

### I PRINCIPLES OF OCEANOGRAPHY AND MARINE BIOLOGY

1. Sounding the Deep 3
2. The Oceanic Environment 17
3. Ecological and Evolutionary Principles 38

### II MARINE ORGANISMS: FUNCTION AND ENVIRONMENT

4. The Chemical and Physical Environment 79
5. Reproduction, Dispersal, and Migration 100
6. Life in a Fluid Medium 137

### III ORGANISMS OF THE OPEN SEA

7. The Water Column: Plankton 151
8. The Water Column: Nekton 168

### IV PROCESSES IN THE OPEN SEA

9. Critical Factors in Plankton Abundance 201
10. Productivity and Food Webs in the Sea 223

### V ORGANISMS OF THE SEABED

11. The Diversity of Benthic Marine Invertebrates 237
12. Seaweeds, Sea Grasses, and Benthic Microorganisms 269
13. Benthic Life Habits 277

## VI COASTAL BENTHIC ENVIRONMENTS

14. The Tidelands: Rocky Shores, Soft-Substratum Shores,  
Marshes, Mangroves, and Estuaries 309
15. Sea Grass Beds, Kelp Forests, Rocky Reefs,  
and Coral Reefs 348

VII PROCESSES ON THE SEABED, FROM THE SHELF  
TO THE DEEP SEA

16. From the Continental Shelf to the Deep Sea 387
17. Biodiversity and Conservation of the Ocean 410

## VIII HUMAN IMPACT ON THE SEA

18. Food from the Sea 439
19. Marine Pollution 470

Glossary 495

Marine Biology Journals 504

Index 505

*Color plate sections follow pages 84, 180, 276, and 372.*