

brief contents

preface

xii

Part One Principles of Marine Science

- 1 The Science of Marine Biology 2
- 2 The Sea Floor 19
- 3 Chemical and Physical Features of Seawater and the World Ocean 39

Part Two Life in the Marine Environment

- 4 The Business of Life 63
- 5 Marine Prokaryotes, Protists, Fungi, and Plants 83
- 6 Marine Animals Without a Backbone 104
- 7 Marine Fishes 139
- 8 Marine Reptiles, Birds, and Mammals 166

Part Three Structure and Function of Marine Ecosystems

- 9 An Introduction to Ecology 198
- 10 Between the Tides 216
- 11 Estuaries: Where Rivers Meet the Sea 240

- 12 Life on the Continental Shelf 251
- 13 Coral Reefs 271
- 14 Life Near the Surface 301
- 15 The Ocean Depths 321

Part Four Humans and the Sea

- 16 Resources from the Sea 351
- 17 The Impact of Humans on the Marine Environment 371
- 18 The Oceans and Human Affairs 401

Appendix A

Answers to the Do-It-Yourself Summaries

Appendix B

Units of Measurement

Appendix C

The World Ocean

Appendix D

Major Coastal Communities of North America

Glossary
Credits
Index