

Assistant Editor, Arlo H. Hemphill Foreword by Graeme Kelleher Maps by Debra Fischman

BARCHI CHAIR LAW

Island Press / WASHINGTON • COVELO • LONDON

Copyright © 2004 Island Press Copyright © 2004 Sylvia A. Earle, *Preface* and *Time for a Sea Change*

All rights reserved under International and Pan-American Copyright Conventions. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher: Island Press, 1718 Connecticut Ave., Suite 300, NW, Washington, DC 20009.

Island Press is a trademark of The Center for Resource Economics.

Library of Congress Cataloging-in-Publication Data

Defying ocean's end : an agenda for action / edited by Linda K. Glover and Sylvia A. Earle ; assistant editor, Arlo H. Hemphill ; foreword by Graeme Kelleher ; maps by Debra Fischman.

p. cm.

Includes bibliographical references (p.). ISBN 1-55963-753-6 (cloth: alk. paper) ISBN 1-55963-755-2 (pbk.: alk. paper)

1. Marine ecology—Congresses. 2. Aquatic resources conservation

—Congresses. I. Glover, Linda K. II. Earle, Sylvia A., 1935—

QH541.5.S3D37 2004

333.95'616—dc22

2004024488

Printed on recycled, acid-free paper using soy-based inks

British Cataloguing-in-Publication Data available

Book design by Creative Project Management, Inc., and Kim Bieler Graphic Design

Manufactured in the United States of America $10\,9\,8\,7\,6\,5\,4\,3\,2\,1$

Preceding page

Golden cownose rays glide through waters surrounding the Galápagos Archipelago.
STERLING ZUMBRUNN, CONSERVATION INTERNATIONAL

Contents

and the second s	XI	
Immitation to Action	xiii	
E. Moore and Sylvia A. Earle		
Monraword	xv	
Graeme Kelleher		
Produce s	xix	
Bw Sylvia A. Earle		
Overview	1	
Linda K. Glover and Arlo H. Hemphill		
Chapter 1. The Caribbean	7	
Mark Spalding and Philip Kramer		
Chapter 2. Seamount Biodiversity, Exploitation		
Gregory S. Stone, Laurence P. Madin, Karen Stocks, Glenn Hovermale,	43	
Borter Hoagland, Mary Schumacher, Peter Etnoyer, Carolyn Sotka and Heather	r Tausig	
Chapter 3. The Southern Ocean:		
Model System for Conserving Resources? John P. Croxall and Phil N. Trathan	71	
John F. Croxan and Fill IV. Hathan		
Chapter 4. Coral Triangle	89	
Jamie Bechtel, Timothy B. Werner, Ghislaine Llewellyn, Rodney V. Salm and Gerald R. Allen		
Chapter 5. The Gulf of California:		Facing page Olive ridley sea turtle hatchling heade
Natural Resource Concerns and the Pursuit of a Vision by María de los Ángeles Carvajal, Exequiel Ezcurra and Alejandro Robles	105	for the Pacific Ocean off Mexico. RODERIC MAST, CONSERVATION INTERNATIONAL

Chapter 6. Lines on the Water: Ocean-Use Planning in Large Marine Ecosystems by Dee Boersma, John Ogden, George Branch, Rodrigo Bustamante, Claudio Campagna, Graham Harris and Ellen K. Pikitch	12
Chapter 7. Rationality or Chaos? Global Fisheries at the Crossroads by Rod Fujita, Kate Bonzon, James Wilen, Andrew Solow, Ragnar Arnason, James Cannon and Steve Polasky	139
Chapter 8. A Global Network for Sustained Governance of Coastal Ecosystems by Stephen B. Olsen, Richard Kenchington, Neil Davies, Guilherme F. Dutra, Lynne Zeitlin Hale, Alejandro Robles and Sue Wells	151
Chapter 9. Restoring and Maintaining Marine Ecosystem Function by Les Kaufman, Jeremy B. C. Jackson, Enric Sala, Penny Chisolm, Edgardo D. Gomez, Charles Peterson, Rodney V. Salm and Ghislaine Llewellyn	165
Chapter 10. Defying Ocean's End through the Power of Communications by Robin Abadia, Brian Day, Nancy Knowlton, John E. McCosker, Nancy Baron, Aristides Katoppo and Hugh Hough	183
Chapter 11. Ocean Governance: A New Ethos through a World Ocean Public Trust by Montserrat Gorina-Ysern, Kristina Gjerde and Michael Orbach	197
Chapter 12. The Unknown Ocean by Laurence P. Madin, Fred Grassle, Farooq Azam, David Obura, Marjorie Reaka-Kudla, Myriam Sibuet, Gregory S. Stone, Karen Stocks, Anne Walls and Gerald R. Allen	213
Chapter 13. Business Plan by Benjamin A. Vitale, Larry Linden, Ivan Barkhorn and Dietmar Grimm	237
Chapter 14. Technology Support to Conservation by Robert J. Fine and Daniel A. Zimble	247
Time for a Sea Change by Sylvia A. Earle	263
Conference Participants	272
Index	275