



WIN-WIN ECOLOGY

*How Earth's Species Can Survive
in the Midst of Human Enterprise*

MICHAEL L. ROSENZWEIG

OXFORD
UNIVERSITY PRESS

2003

OXFORD
UNIVERSITY PRESS

Oxford New York
Athens Auckland Bangkok Buenos Aires Cape Town Chennai
Dar es Salaam Delhi Hong Kong Istanbul Karachi Kolkata
Kuala Lumpur Madrid Melbourne Mexico City Mumbai Nairobi
São Paulo Shanghai Taipei Tokyo Toronto

Copyright © 2003 by Michael Rosenzweig

Published by Oxford University Press, Inc.
198 Madison Avenue, New York, New York 10016

www.oup.com

Oxford is a registered trademark of Oxford University Press

All rights reserved. No part of this publication
may be reproduced, stored in a retrieval system, or transmitted,
in any form or by any means, electronic, mechanical,
photocopying, recording, or otherwise, without the prior
permission of Oxford University Press.

Library of Congress Cataloging-in-Publication Data
Rosenzweig, Michael L.

Win-win ecology : how the earth's species can survive in
the midst of human enterprise / Michael L. Rosenzweig
p. cm.

Includes bibliographical references (p.).

ISBN 0-19-515604-8

1. Nature conservation—Economic aspects.
2. Biological diversity conservation—Economic aspects.
3. Human ecology.

I. Title.

QH75 .R69 2003

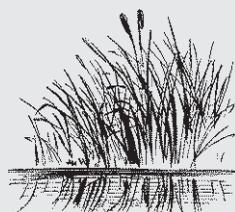
333.95'16—dc 21

2002029281

1 3 5 7 9 8 6 4 2

Printed in the United States of America
on recycled, acid-free paper.

Dedicated to Gordon Orians
the very model of a compleat ecologist



Contents

Preamble ix

CHAPTER 1
Reconciliation Ecology 1

CHAPTER 2
Landscape Architecture for the Third Millennium 11

CHAPTER 3
Prometheus in the Pinelands 27

CHAPTER 4
Making Money 39

CHAPTER 5
Hidden Costs 55

A Personal Witness 65

CHAPTER 6
Hard-Core Reconciliation 69

CHAPTER 7
Happy Accidents 85

CHAPTER 8
The Tyranny of Space 101

CHAPTER 9
Falling Down the Time Shaft: The Case of the Incredible
Shrinking Planet 127

CHAPTER 10
Fighting for Crumbs: The Traditional Forms of Biological
Conservation 143

CHAPTER 11
Extinction Happens 153

CHAPTER 12
Clearing Hurdles 165

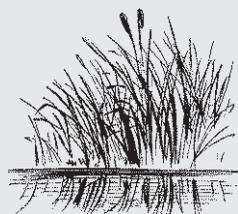
Notes 183

Acknowledgments 193

Illustration Sources 194

Index 195

Preamble



There is still time. There is good reason to believe that civilization need not destroy most of the Earth's nonhuman species. The trick is to learn how to share our spaces with other species. If we do so, we won't find ourselves bereft of our plant and animal cousins and hoping for a visit from extraterrestrials to keep us company.

Sharing our habitats deliberately with other species. I call this "reconciliation ecology." The evidence cries out for us to do a lot more of it, and that doing a lot more of it can save most of the world's species. This book will explore that evidence.

The book will also describe many examples of reconciliation ecology, stories of people who have designed habitats for themselves or for their enterprises, and then find out that wild things also use these habitats successfully. Sometimes the sharing is accidental, sometimes quite purposeful. But sharing works. And it is very cheap.

Despite its title, the book may displease some of those who are devoted to "green" causes. They may not trust my claim that we need to end the battle between ecology and economics. But this is a book of science, not theology and not politics. And the claim comes straight from the ecological science of diversity. The science is very clear, and those who care about wild species can do them no better favor than to be guided by it.

Nevertheless, this book is not a signal for environmentalists to surrender their cause to those human beings whose job it is to exploit the Earth. I want our developers, fishers, farmers, ranchers, and tree growers to realize that I am not only calling for environmental peace and cooperation, but also for a radical change in the way they treat the land and waters of this planet. I am not asking them to stop earning a living or making a profit. People and their enterprises will not be denied, and *need* not be denied. But we can avoid a mass extinction of Earth's species without ourselves committing mass suicide.