

Wildlife  
Responses  
*to*  
Climate Change

NORTH AMERICAN CASE STUDIES

*Edited by*  
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and Terry L. Root

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## *Foreword*

It was not long ago that the big question about climate change was whether or not it actually was taking place. Now, there is broad scientific consensus that it is, in fact, happening, and that human activities are largely to blame.

The most recent body of scientific evidence sounds a warning that global climate change could occur more quickly than previously thought, and take an even greater toll on people and wildlife. We are beginning to see convincing evidence that climate trends are already affecting the Earth's natural systems: butterflies are moving north, birds are breeding earlier, and coral reefs are bleaching across the globe.

While the challenge of global climate change is daunting, the first step toward creating the solution is understanding the problem. The National Wildlife Federation is committed to providing and supporting the sound science necessary to build that understanding and to shape the solutions that will mitigate an environmental problem that is global in scale.

This book is the culmination of a three-year project to research and study the impacts of global climate change on U.S. ecosystems and individual wildlife species. In 1997, we provided fellowships to eight outstanding graduate students to conduct research on global climate change. NWF engaged Steven Schneider, Ph.D., and Terry Root, Ph.D., two of the world's leading scientists studying the effects of climate change on wildlife, to shepherd the students through their studies. This work, combined with the generous support of a Dorothy Chancellor Estate grant, enables NWF to add to

the body of knowledge critical to scientists, resource managers, and policymakers in shaping a solution to the climate change crisis.

The book has another important function too. By detailing the potentially devastating effects of climate change on wildlife and their habitat, we hope to stir the concern and the action of countless people who care deeply about the fate of our natural world. Such people have previously rallied America behind historic efforts to clean up our air and water and to save imperiled species. Addressing the crisis of global climate change will require an even greater commitment to action and, in keeping with its long and distinguished history, the National Wildlife Federation will help to provide the knowledge, the understanding, and the tools to make it possible. Nothing less than the future of both people and wildlife depends on it.

—MARK VAN PUTTEN  
President and CEO  
National Wildlife Federation